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8
9 **IN THE SECOND JUDICIAL DISTRICT COURT**
10 **OF THE STATE OF NEVADA IN AND FOR THE COUNTY OF WASHOE**

11
12 * * *

13 ROBERT BEADLES, an individual,

14 Plaintiff,

Case No. CV23-01341

15 vs.

Dept No. D9

16 JAMIE RODRIGUEZ, in her official
capacity as Registrar of Voters and in her
17 personal capacity; the WASHOE COUNTY
REGISTRAR OF VOTERS, a government /
18 agency; ERIC BROWN in his official
capacity as WASHOE COUNTY
19 MANAGER and in his personal capacity,
ALEXIS HILL in her official capacity as
20 CHAIRWOMAN OF WASHOE
COUNTY BOARD OF
21 COMMISSIONERS and in her personal
capacity; WASHOE COUNTY, a political
22 subdivision of the State of Nevada, and
DOES I-X; and ROE CORPORATIONS I-
23 X.

24 Defendants.

25 **MOTION FOR SANCTIONS**

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1 Defendants, by and through their counsel, Deputy District Attorney Lindsay
2 Liddell, hereby move for sanctions pursuant to NRCP 11 in the form of dismissal of the
3 Complaint, a monetary sanction paid to the Court, and attorneys' fees and costs. This
4 Motion is based on the following Memorandum of Points and authorities, NRCP 11, the
5 exhibits attached hereto, and all pleadings on file in this Court including the Motion to
6 Dismiss filed August 15, 2023.

7 **MEMORANDUM OF POINTS AND AUTHORITIES**

8 **I. BACKGROUND.**

9 Plaintiff Robert Beadles ("Beadles") frivolously filed the Complaint with claims not
10 warranted by existing law, not supported by facts, and to harass Defendants Washoe
11 County Commissioner Alexis Hill ("Commissioner Hill"), Washoe County Manager Eric
12 Brown ("Manager Brown"), and Washoe County Registrar of Voters Jamie Rodriguez
13 ("Ms. Rodriguez").

14 Beadles seeks apocryphal relief, attempting to use this Court to harass Defendants
15 and insurrect Washoe County's elections procedures. The Complaint includes two causes
16 of action: (1) alleged violation of his rights because Defendants did not respond to his
17 elections "petitions," and (2) an attempt to remove Commission Hill, Manager Brown,
18 and Ms. Rodriguez from their positions. Defendants filed a Motion to Dismiss because
19 both actions lack merit. Defendants hereby incorporate the Motion to Dismiss as though
20 set forth fully herein.

21 Beadles seeks to improperly use this Court to harass, rather than to adjudicate
22 legitimate legal claims. He singles out Commissioner Hill, who he vehemently disagrees
23 with, and brings meritless claims attempting to remove her from office. Assuming arguendo
24 there was merit, all County Commissioners would be subject to removal for the same
25 allegations. Yet, Beadles only attacks Commissioner Hill with this action.

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1 He seeks unavailable relief, including asking this Court to invalidate provisions of the
2 NRS, requiring Defendants use paper ballots, “[e]njoin the Defendants and make the
3 digitized vote tally database (Microsoft SQL) open for public inspection,” require
4 Defendants disclose applicant name and credentials, prohibit Defendants from using QR
5 codes, “halt” Defendants’ expenditure of “unapproved and unsafe equipment and
6 software.” *Compl.* at p. 14–17.

7 The Complaint contains conclusory false statements, including the repeated assertion
8 that Defendants had a duty to respond to his “Petitions;” that Defendants oversaw the 2020
9 election, despite Commissioner Hill and Ms. Rodriguez not assuming their current roles
10 until 2021 and 2022, respectively; that Defendants “willfully committed acts of
11 malpractice, maladministration, and/or nonfeasance, and perjury...;” that the Washoe
12 County Registrar of Voters is unprepared to run the 2024 presidential election; that the
13 County’s elections are “tainted” with inaccurate voter rolls; that there are “illegal
14 functions” within the electronic system that alter intended votes; that votes are counted
15 without adequate verification and with disregard to signature verification; that the elections
16 generally violated federal and state law; and that “his vote did not count as he cast it and
17 thus has been robbed of his right to suffrage.” *See Compl.*

18 Beadles’s claims are not based in law. He names Defendants Ms. Rodriguez,
19 Commissioner Hill, and Manager Brown in both their official and personal capacities.
20 There is no legal basis to pursue constitutional claims in those Defendants’ official
21 capacities. He names the Registrar of Voters, an unusable county department. He
22 improperly attempts to seek election-related injunctive relief under a statute that allows
23 only for a public official’s removal. Beadles’s claims are disordered and baseless.

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1 Additionally, Beadles engaged in sanctionable forum and judge shopping. He filed
2 the instant Complaint duplicating claims he filed two weeks prior because of his preference
3 to litigate in state court. He then filed multiple motions to “request” a specific judge, filed
4 peremptory challenges in both cases, and still unsatisfied now seeks a change of venue and
5 motioned this Court for a recusal. Forum and judge shopping are improper purposes, in
6 violation of Rule 11.

7 Moreover, Beadles seems to acknowledge his Rule 11 violations, alleging:

8 Plaintiff comes before the court *pro se* because many BAR-certified
9 attorneys are being targeted, dis-barred, sanctioned, etc. for simply
10 bringing an elections-related lawsuit forward. Plaintiff hereby
represents himself *pro se* to save his lawyers from attacks on their
livelihoods.

11 *Compl.* at ¶12.

12 As set forth below, the Court should sanction Beadles, including a monetary sanction
13 paid to the court, an award of Defendants’ attorneys’ fees and costs, and dismissal of this
14 action. Pursuant to NRCP 11(c)(2), a copy of this Motion was provided to Beadles on
15 August 16, 2023, at least twenty-one days before filing the instant Motion. *See Ex. 1,*
16 *Declaration of Suzi Haldeman; Ex. 2, Rule 11 Letter.* Beadles was also put on notice of his
17 Rule 11 violations in a similar Rule 11 letter and proposed motion for sanctions, which he
18 disregarded. Beadles was afforded a reasonable opportunity to take remedial action and
19 failed to do so. *See id.* It is readily apparent that Beadles lacks a reasonable basis in fact or
20 law to pursue his claims and requested relief. Sanctions are appropriate.

21 **II. BEADLES VIOLATED RULE 11 AND SANCTIONS ARE WARRANTED.**

22 When a party files a complaint, they certify that to the best of his knowledge,
23 information and belief formed after an inquiry reasonable under the circumstances:

- 24 (1) it is **not being presented** for any improper purpose, such
25 as **to harass**, cause unnecessary delay, or needlessly
increase the cost of litigation;

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- 1 (2) the claims, defenses, and other legal contentions are
2 **warranted by existing law** or by a nonfrivolous argument
3 for extending, modifying, or reversing existing law or for
4 establishing new law;
5 (3) the **factual contentions have evidentiary support** or, if
6 specifically so identified, will likely have evidentiary
7 support after a reasonable opportunity for further
8 investigation or discovery; and
9 (4) the denials of factual contentions are warranted on the
10 evidence or, if specifically so identified, are reasonably
11 based on a belief or lack of information.

12 NRCP 11(b)(emph. added).

13 “Rule 11 is intended to deter baseless filings in district court and imposes a duty of
14 reasonable inquiry so that anything filed with the district court is well grounded in fact,
15 legally tenable, and not interposed for any improper purpose.” *Walker v. City of N. Las Vegas*,
16 394 F. Supp. 3d 1251, 1260 (D. Nev. 2019), *appeal dismissed*, 19-16305, 2020 WL 3620207
17 (9th Cir. Jan. 21, 2020) (quotations omitted).¹ Rule 11 should be vigorously applied to
18 “curb widely acknowledged abuse from the filing of frivolous pleadings.” *In Re Grantham*
19 *Bros.*, 922 F.2d 1438, 1441 (9th Cir. 1991)(quotations omitted).

20 Rule 11 sanctions should be imposed for the filing of frivolous actions. *Bergmann v.*
21 *Boyce*, 109 Nev. 670, 676, 856 P.2d 560, 564 (1993), *superseded by statute on other grounds as*
22 *recognized in In re DISH Network Derivative Litig.*, 133 Nev. 438, 451 n.6, 401 P.3d 1081, 1093
23 n.6 (2017). A frivolous action is one that is “both baseless and made without a reasonable
24 and competent inquiry.” *Id.*, *citing Townsend v. Holman Consulting Corp.*, 929 F.2d 1358, 1362
25 (9th Cir. 1990). The determination of frivolity is two-pronged: (1) the court must determine
26 whether the pleading is “well grounded in fact and is warranted by existing law or a good
faith argument for the extension, modification or reversal of existing law,” and (2) whether

¹ “Federal cases interpreting the Federal Rules of Civil Procedure are strong persuasive authority, because the Nevada Rules of Civil Procedure are based in large part upon their federal counterparts.” *Executive Mgmt., Ltd. v. Ticor Title Ins. Co.*, 118 Nev. 46, 53, 38 P.3d 872, 876 (2002) (internal quotations omitted).

1 the party made a reasonable and competent inquiry. *Id.*

2 **A. BEADLES FILED THE COMPLAINT TO HARASS DEFENDANTS.**

3 “The trial court must examine the actual circumstances surrounding the case to
4 determine whether the suspect claims were brought without reasonable ground.” *Bergmann*,
5 109 Nev. at 676, 856 P.2d at 564.

6 Beadles filed the instant Complaint to vex and harass Defendants in pursuit of his
7 personal animus against Commissioner Hill, Manager Brown, and Ms. Rodriguez. Beadles
8 runs a blog where he regularly opines on government operations and expresses his disdain
9 for Commissioner Hill, Manager Brown, and Ms. Rodriguez. *See Ex. 3, Beadles’s Post*
10 *entitled “I Just Sued Them All For You!”* Ex. 4, *Beadles’s Post entitled “We SUED for YOU!”* Ex.
11 5, *Beadles’s Post entitled “Comrade Hill-Insky,”* Ex. 6, *Beadles’s Post entitled “Over the Hill.”*
12 Beadles regularly expresses his hostility regarding Defendants—describing Commissioner
13 Hill as a communist and referring to her as “Comrad Hill-insky,” referring to Manager
14 Brown as “Eric Brownstain,” and referring to Ms. Rodriguez as “the utterly incompetent,
15 who’s not competent enough to clean toilets let alone our voter rolls.” Ex. 4; Ex. 5.

16 In a blog post describing his first, nearly identical Complaint, Beadles declared he
17 was “putting it all on the line to sue the County Manager, ROV and Commissioner Chair –
18 in both their personal and official capacities and the whole damn county itself.” Ex. 3.
19 Beadles’s tone shows he needlessly extended his claims to include various capacities and
20 “the whole damn county.” *See id.* He states, “I’m calling them out on every front.” *Id.*
21 While Beadles has a right to express himself on his blog, his disdain for Defendants
22 displayed therein is relevant to the circumstances giving rise to this litigation, specifically
23 his intention to further harass Commissioner Hill, Manager Brown, and Ms. Rodriguez
24 through the misuse of this Court.

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1 Beadles’s choice to name Commissioner Hill as a defendant rather than all
2 commissioners suggests Beadles seeks to harass Commissioner Hill with this action.
3 Beadles is well aware that Commissioner Hill cannot bind Washoe County in action on her
4 own—a majority vote of the Board of County Commissioners is required. Moreover,
5 assuming arguendo Commissioner Hill owed any duty to Beadles as he alleges, all County
6 Commissioners would owe him that duty and would have fallen short according to his
7 unviable legal theory.

8 Beadles inappropriately singles out Commissioner Hill in an attempt to use this case
9 to further his scheme of harassing her. Upon information and belief, Beadles does not
10 reside in Commissioner Hill’s district. Yet, he seeks to intervene and remove her from
11 representing her constituents. Beadles makes no attempts to conceal his personal disdain
12 for Commissioner Hill. *See* Ex. 5; Ex. 6. On August 14, 2023, he referred to Commissioner
13 Hill as having “totalitarian Kermit The Frog-type energy.” Ex. 6. He also expressed his
14 strong distaste for the way she runs County Commission meetings as chair. *Id.*

15 Beadles further demonstrates the vexatious nature of this case by waiting nearly eight
16 months to seek redress for petitions Beadles’s alleges he filed in fall 2022. A genuine legal
17 claim arising from those petitions, would have been brought shortly after they were
18 allegedly “ignored.” Further showing Beadles’s sanctionable conduct in filing the
19 Complaint, he acknowledges attorneys have been sanctioned for filing similar elections-
20 related claims. *Compl.* at ¶12.

21 In addition, as set forth below, Beadles’s improper purpose can be deduced where
22 there is no legal or factual basis for a claim. *Paciulan v. George*, 38 F.Supp.2d 1128 (N.D. Cal.
23 1999). His pursuit of unviable claims and false allegation shows this case is not about
24 redressing legitimate legal disputes. It is instead another avenue to harass, vex, and
25 consume Defendants’ resources.

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1 Beadles violated Rule 11 by filing the Complaint for an improper purpose, and
2 sanctions are warranted on that basis alone. *See e.g., Knipe v. Skinner*, 10 F.3d 72, 77 (2d Cir.
3 1994)(affirming Rule 11 sanctions, where, as the district court found, filing of the action
4 was “[a]nother creative avenue to beat a dead horse” and the “pursuit[t of] a personal
5 agenda against [a government entity]” without a good faith basis). Based on Beadles’s well
6 documented personal animus and the profound lack of merit to his causes of action, an
7 improper purpose can be inferred.

8 **B. BEADLES FILED THE INSTANT COMPLAINT FOR THE IMPROPER PURPOSE**
9 **OF FORUM SHOPPING.**

10 “Forum shopping is ‘[t]he practice of choosing the most favorable jurisdiction or
11 court in which a claim might be heard.’” *Uber Tech., Inc. v. Second Jud. Dist. Court of State ex*
12 *rel. County of Washoe*, 130 Nev. 1256, 2014 WL 6680785 at *2 (Nov. 24, 2014(unpublished
13 disposition), quoting BLACK’S LAW DICTIONARY 681 (8th ed. 2004). “Forum shopping” is
14 disfavored in Nevada State Courts. *See, e.g., Adams v. Adams*, 107 Nev. 790, 795, 820 P.2d
15 752 (1991); *Lyon County v. Washoe Med. Cntr., Inc.*, 104 Nev. 765, 768, 766 P.2d 902, 904
16 (1988). The practice of “forum shopping” is “inimical to sound judicial administration.”
17 *Pub. Serv. Comm’n of Nev. v. SW. Gas Corp.*, 103 Nev. 307, 308, 738 P.2d 891, 891 (1987).

18 Forum shopping is sanctionable under Rule 11. *C. v. Rady Children’s Hosp.*, 17-cv-
19 0846-AJB-JLB, 2017 WL 6327138, at *5 (S.D. Cal. Dec. 8, 2017); *Fransen v. Terps, LLC*, 153
20 F.R.D. 655, 660 (D. Colo. 1994)(imposing Rule 11 sanctions for a “blatant example of
21 forum shopping”). In *C. v. Rady Children’s Hosp.*, plaintiff engaged in similar conduct as
22 Beadles in the reverse order—plaintiff filed a state court action, then dismissed that action
23 and refiled a complaint in federal court omitting state law claims. 2017 WL 6327138, at *5.
24 The plaintiff expressly stated they did this to pursue claims in their preferred venue. *Id.* The
25 court found that “plaintiffs’ filing in federal court due to a general dissatisfaction with state

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1 court was improper forum shopping, and also grounds for Rule 11 sanctions.” *Id.* The
2 court awarded the opposing party their attorneys’ fees as sanction. *Id.* at *6.

3 Beadles filed the instant case for the purpose of forum shopping, which is an
4 improper purpose in violation of Rule 11. He filed the instant Complaint duplicating
5 claims in a case that he filed two weeks prior, only deleting the Federal claims. *See Beadles v.*
6 *Rodriguez, et al, CV23-01283 (Second Judicial District Court).*² Defendants removed the
7 initial action to federal court because it contained claims arising under federal law.
8 Defendants served Beadles with a Rule 11 letter and proposed motion for sanctions, and
9 then Beadles³ withdrew the complaint in federal court. In this Court Beadles engaged in
10 improper procedure, re-filing his complaint with the federal claims deleted.

11 Beadles makes no attempt to conceal his Rule 11 violation based on forum
12 shopping. *See Ex. 7, Beadles’s Post entitled “Lawsuit(S) UPDATE!”* In a recent blog post,
13 Beadles states “...I filed a new lawsuit and only incorporated 2 State causes of action, with
14 no Federal causes of action. This way, I would stay in State Court as that’s where I want to
15 be right now, and that’s where remedies need to take place.” Ex. 7 at p. 3.

16 Additionally, in both the instant action and the first case, he goes so far as to
17 specifically request the judge he prefers to hear this action, inappropriately asserting that he
18 is entitled make such a request and opine on the qualifications of his desired judicial
19 officer. *See Mot. to Request Judge Simons; 2nd Mot. to Request Judge Simons.* In each case, he
20 also filed peremptory challenges in an attempt to obtain his desired judge. Dissatisfied, he
21 then moved to recuse the presiding judge, making baseless and outrageous claims regarding
22 the Court’s collusion with the defense and taking issue with the Court’s adherence to the

23
24 ² “A judge or court shall take judicial notice if requested by a party and supplied with the necessary
25 information.” NRS 47.150(2). Defendants hereby request the Court take judicial notice of all filings in the
26 First Action, Second Judicial District Court case number CV23-01283, removed to the United States District
Court District of Nevada, case number 3:23-cv-00382-ART-CSD.

³ The federal court’s docket identifies attorney Sigal Chattah as the filer, but the filing itself identifies Beadles
acting pro se. *See Docket for United States District Court District of Nevada, case no. 3:23-cv-00382-ART-CSD.*

1 rule against ex parte communication. *See Mot. for Recusal of Judge*. He also moved to change
2 venue to Lyon County, again making baseless claims of bias. *Mot. to Change Venue*. The
3 filing of the instant complaint and various motions to request a specific judge, to change
4 venue, and to recuse the presently presiding judge are improper forum and judge shopping.

5 This overt Rule 11 violation warrants sanctions, including a monetary award to this
6 court.

7 **C. THE COMPLAINT CONTAINS FALSE STATEMENTS.**

8 Though unrelated to his claims, Beadles includes allegations that Defendants
9 oversaw elections in 2020. *Copml.* at ¶¶29, 38. As an initial matter, Beadles is well aware
10 that Commissioner Hill was not a County Commissioner until 2021. Beadles is also aware
11 that Ms. Rodriguez did not take on the Registrar for Voters role until 2022. Beadles’s
12 reckless disregard for facts is evident with these allegations.

13 Moreover, Beadles falsely alleges that Commissioner Hill and Manager Brown
14 “handle voter registrations and conduct elections on behalf of the people of Washoe
15 County.” *Compl.* at ¶14. Beadles acknowledges that Ms. Rodriguez is the appointed
16 Registrar of Voters. *See Compl.* at ¶14, ¶15. He acknowledges that the Registrar of Voters
17 has all the powers and duties that would otherwise be assigned to a county clerk regarding
18 elections. *See Compl.* at ¶14(citing NRS 244.164); WCC 5.451(4). Based on that knowledge,
19 Beadles should know that County Manager and the Chairperson for the Board of
20 Commissioners are not directly involved in conducting elections. Manager Brown and
21 Commissioner Hill have no such duties nor power, yet Beadles maintains each handles and
22 oversees elections. *Compl.* at ¶¶14, 29, 38.

23 Beadles also makes various false statements regarding Washoe County elections,
24 including: “unclean and grossly inaccurate voting rolls,” “unapproved and unsecure voting
25 systems,” “rush toward pioneering new technology that could impact county, state, and
26 national security,” “failure to train staff and election officials,” “unequal treatment of

1 signatures at the polls,” “counting of votes in secret,” “illegal function within the election
2 system,” and “gross violations of the Nevada Revised Statutes and Administrative Codes
3 regarding election procedures and the list goes on.” *Compl.* at ¶33.

4 Some of the aforementioned statements are so vague that a pointed response is
5 difficult, but the statements are nonetheless inaccurate rantings of a conspiracy theorist
6 disconnected from any legitimate claim. The more specific statements—e.g. unequal
7 treatment of signatures, failure to train staff, unsecure voting systems, inaccurate voting
8 rolls—are false. Ex. 8, *Declaration of Jamie Rodriguez*. Beadles knows or should know, based
9 on the information Washoe County has thus far directly or indirectly provided to him he
10 should know his allegations lack evidentiary support.

11 For example, last year Beadles litigated his allegation of counting votes in secret. *See*
12 *Robert Beadles et al. v. Barbara Cegavske et al., Second Judicial District Court of the State of Nevada*
13 *case no. CV22-00661*. In that case, Beadles alleged the previous Washoe County Registrar of
14 Voters denied “meaningful observation” of ballot processing, and requested injunctive
15 relief including personal viewing within two feet of voting machines, visual inspection of
16 each ballot, observer presence at drop boxes, ability to halt ballot processing, etc. *See Compl.*
17 *for Dec. and Inj. Relief, filed in case no. CV22-00661*. Denying injunctive relief, the Court
18 opined:

19 Plaintiffs ask the Court to interpret the word ‘observation’ to
20 encompass a host of duties and rights that are not included in the
21 relevant statutes, but they do not cite any case or constitutional
22 principle that would entitle them to the detailed forms of relief that
they seek. The relief would also slow and complicate the voting
process and inject the judiciary into that process, without any showing
that such relief is necessary to protect any legal right that Plaintiffs
have.

23 *Order Denying Motion for Temporary Restraining Order, filed in case no. CV22-00661*.

24 Though the Court in *Robert Beadles et al. v. Barbara Cegavske et al.* found no issue with
25 Washoe County’s public observation of elections procedures, Beadles now asserts secret
26 vote counting and violations of Nevada law.

1 Beadles likewise proffers false statements regarding election integrity. *Compl.* at ¶¶33,
2 35, 40, 47–53, 81, 91. Beadles’s allegations and fugitively filed⁴ “evidence” seek to relitigate
3 “evidence” proffered in gubernatorial candidate Joey Gilbert’s 2022 primary election
4 contest. *See Ex. 9, Statement of Contest of the June 14, 2022, Primary Election Pursuant to NRS §*
5 *293.407, filed in the First Jud. Dist. Ct. of the State of Nevada in and for Carson City, case no. 22*
6 *OC 000851B* (“2022 Gilbert Election Contest”).⁵ Beadles paid for 2022 Gilbert Election
7 Contest, which relied on debunked mathematics to assert that ballot data was illegally
8 altered. *See id.*; *Ex. 10, Order Granting Defendant Joseph Lombardo’s Motion for Summary*
9 *Judgment filed in the 2022 Gilbert Election Contest.* The source of the debunked mathematics is
10 Edward Soloman, a self-proclaimed “expert” without formal qualifications who could not
11 qualify as an expert in a court of law. *See Ex. 10.* The Court granted Governor Lombardo
12 summary judgment, finding that “the Soloman Report also does not constitute the type of
13 evidence ‘reasonably relied on by experts’ under NRS 50.285(2).” *Id.* at ¶5.

14 Gilbert was sanctioned and ordered to pay Governor Lombardo’s attorneys’ fees.
15 *Order Granting Defendant Joseph Lombardo’s Motion for Sanctions, filed in the 2022 Gilbert*
16 *Elections Contest* (“Mr. Gilbert did not—and could not—present any admissible evidence to
17 support the case-dependent thesis that the restored election results show he received the
18 most votes in the 2022 Primary”). The Court found that the 2022 Gilbert Elections
19 Contest, which was based on a Soloman Report, was frivolous. *Id.*; *Ex. 9.* The Court found
20 the claim regarding “math” was “highly dubious,” and his contentions did not “rise to the
21 level of a well-grounded claim under Nevada law.” *Ex. 11* at ¶5.

22 //

23
24 ⁴ On August 9, 2023, Beadles filed a document titled “Supplemental Exhibits in Support of Plaintiff’s
25 Complaint,” and, upon information and belief, delivered several boxes of records to the Court. Supplemental
26 pleadings are not permitted without leave of Court. NRC 15(d). The Court may strike “any redundant,
immaterial, impertinent, or scandalous matter.” NRC 12(f).

⁵ Defendants request this Court take judicial notice of Exhibits 9–11.

1 In the present case, Beadles seeks to relitigate the debunked mathematics, despite the
2 Beadles-funded 2022 Gilbert Election Contest resulting in hefty sanctions. Beadles falsely
3 asserts Defendants conduct unfair and inaccurate elections and that his vote did not count
4 as he cast it. *Compl.* at ¶52, ¶81. Like in the Gilbert contest, Beadles is seeking to present
5 various reports and communications from Edward Soloman. *Comp. Supplemental Exhibits in*
6 *Support of Plaintiff’s Complaint* at Exs. 65, 67, 70, 104, 105, with Ex. 9. Beadles should
7 know that Soloman’s reports lack merit, yet he continues to rely on them to make dubious
8 claims that elections in Washoe County are “unfair and inaccurate.” This is sanctionable.

9 Beadles also falsely states that “defendants have a duty and obligation to respond to
10 Petition of elections...” *Compl.* at ¶43. The law imposes no such duty to “respond,” and no
11 such duty on Defendants specifically. *See* NRS 293.2546(11), NAC 293.025(requireing
12 elections complaints be submitted to the Secretary of State).

13 Beadles’s allegations are unencumbered by the duty to proffer only that which can be
14 supported by admissible evidence. Just like in *Robert Beadles et al. v. Barbara Cegavske et al.*,
15 *case no. CV22-00661* Beadles seeks to inject the judiciary into the elections process.
16 Moreover, like in the 2022 Gilbert Elections Contest, sanctions are warranted for this
17 frivolous elections-related case. It is entirely inappropriate to place these false allegations in
18 a pleading, and doing so is sanctionable under Rule 11.

19 **D. THE COMPLAINT CONTAINS CLAIMS NOT BASED IN LAW.**

20 **i. Beadles Seeks Unattainable Relief.**

21 Beadles’s improper purpose is displayed in his requested relief, wherein he seeks
22 relief that could not be granted even if his claims were viable. The Complaint contains
23 various allegations regarding voter rolls and general elections procedures. Beadles then
24 pursues claims based on failure to respond to his elections petitions and a claim to remove
25 Defendants from their positions. There is a vast disparity between the factual assertions
26 made, the harm claimed, and the ultimate relief requested.

1 In his “Demand for Relief,” Beadles asks the Court to “strike down NRS
2 293.269935(2) and 293.3606(4) to allow public inspection of ballots.” *Compl.* at p. 16. He
3 asks that the Court prohibit Defendants from “using any voting and tabulation machines
4 for elections,” which the law allows them to do. *Id.* He asks that the Court require
5 Defendants to use paper ballots, “[e]njoin the Defendants and make the digitized vote tally
6 database (Microsoft SQL) open for public inspection,” require Defendants disclose
7 applicant name and credentials, prohibit Defendants from using QR codes, “halt”
8 Defendants’ expenditure of “unapproved and unsafe equipment and software.” *Id.* He also
9 requests that the Court require Defendants “take into account and redress all elections
10 issues that Plaintiff puts on the table, no shying away.” *Id.* at p. 15.

11 Beadles improperly attempts to use this Court as a vehicle to direct Washoe
12 County’s elections policies. The majority of the relief he seeks is not relief available for the
13 claims he alleges, assuming arguendo that he stated a claim on which any relief could be
14 granted. He makes no allegation nor claim to support the relief requested above. From this
15 alone, the Court may infer his improper purpose in filing the Complaint. *See Paciulan*, 38
16 F.Supp.2d 1128.

17 **ii. Claims Against the Office of the Registrar of Voters are**
18 **Unviable.**

19 A department of a county is not a suable entity because it is not political subdivision
20 of the State of Nevada. *Wayment v. Holmes*, 112 Nev. 232, 237–38, 912 P.2d 816, 819; *see*
21 *also Schneider v. Elko Cnty. Sheriff’s Dep’t*, 17 F. Supp. 2d 1162, 1165 (D. Nev.
22 1998)(dismissing suit against a county sheriff’s department for lack of capacity to be sued).
23 A county department is “immune from suit” because it is not a suable entity. *Wayment*, 112
24 Nev. at 239, 912 P.2d at 820.

25 Beadles’s claims against the Registrar of Voters are not warranted by law. The
26 Registrar of Voters is a department of Washoe County, and not a suable entity. This issue is

1 straightforward, and Beadles was notified of the same as early as August 8, 2023. Ex. 1 at
2 ¶2. Yet, Beadles continues to pursue a claims against the Office of the Registrar of Voters.
3 Beadles violated Rule 11 by filing claims against the Registrar of Voters.

4 **iii. Beadles Relies on Inapplicable Law to Pursue Criminal**
5 **Liability.**

6 Beadles’s Fourth Cause of Action, citing NRS 283.440 and NRS 266.430, demands
7 Ms. Rodriguez’s removal from her appointed position as Registrar of Voters, Manager
8 Brown’s removal from his appointed position as Washoe County Manager, and
9 Commissioner Hill’s removal from her elected position as Chair of the Washoe County
10 Board of County Commissioners.

11 NRS 266.430 is a criminal statute that provides for the removal of the mayor or any
12 municipal officer of an incorporated city or town who is adjudged guilty of nonfeasance,
13 misfeasance or malfeasance by any court of competent jurisdiction. Setting aside that a
14 member of the public cannot pursue criminal liability, Beadles relies on clearly inapplicable
15 law. Defendants are employed by Washoe County, not an incorporated city or town, and
16 this is a civil action. As such, NRS 266.430 is inapplicable as a matter of law.

17 Relief sought under NRS 266.430 is not warranted by law, and further evidences
18 Beadles’s improper purpose in bringing the present action.

19 **iv. Beadles’s Claim Regarding Elections Petitions are Baseless.**

20 Beadles alleges that by not acknowledging and responding to the three documents
21 he and others submitted to Defendants complaining about election processes and
22 contesting the 2022 election, Defendants “deprived Plaintiff to have his grievances heard as
23 enshrined in Nev. Const. Art. 1 § 10.” *Compl.* at p. 11–12. Article 1 Section 10 of the
24 Nevada Constitution, titled “Right to assemble and to petition,” provides: “The people
25 shall have the right freely to assemble together to consult for the common good, to instruct
26 their representatives and to petition the Legislature for redress of Grievances.” Beadles’s

1 allegations, specifically that the Washoe County Manager, Chair of the Washoe County
2 Board of County Commissioners, and the Washoe County Registrar of Voters did not
3 respond to his complaints, does not give rise to a claim under Article 1 Section 10 of the
4 Nevada Constitution. Construing the Complaint broadly, there are no facts alleged that, if
5 true, demonstrate that Defendants impeded Beadles’s right to assemble, to instruct his
6 representatives, or to petition the Legislature. The Complaint fails to state a claim for a
7 violation of Article 1 Section 10 of the Nevada Constitution.

8 Next, Beadles alleges Defendants violated his rights under Article 2 Section 1A(11)
9 of the Nevada Constitution because he has a “constitutional right to pose grievances and
10 have them resolved “fairly, accurately and efficiently,” but Defendants ignored his
11 complaints. *Compl.* at p. 11–12. Article 2 Section 1A(11) provides that each registered
12 voter in the State of Nevada has the right “to have complaints about elections and election
13 contests resolved fairly, accurately and efficiently as provided by law.” This provision of the
14 Nevada Constitution is codified in NRS 293.2546(11), the Nevada Voters’ Bill of Rights.

15 The Nevada Secretary of State is the Chief Officer for Elections in the State. NRS
16 293.124. As Chief Officer for Elections, the Secretary of State is responsible for the
17 execution and enforcement of all provisions of NRS Title 24 and all other provisions of
18 State and Federal law relating to elections in this State. *Id.* Consistent with this framework,
19 NAC 293.025 provides, “A person who wishes to file a complaint concerning an alleged
20 violation of any provision of title 24 of NRS must: 1. Submit the complaint in writing to
21 the Secretary of State; and 2. Sign the complaint.” In addition to submitting complaints to
22 the Secretary of State concerning any alleged violation of NRS Title 24 (NRS Chapters
23 293–306), any registered voter may contest the election of a candidate by filing a Statement
24 of Contest with the clerk of the district court. NRS 293.407.

25 //

26 //

1 Nothing in Nevada law required Defendants to respond to documents that, by law,
2 were required to be submitted to the Nevada Secretary of State or the district court. As
3 such, these claims are not warranted by law and Beadles should be sanctioned for pursuing
4 the same.

5 **v. The Removal Action Lacks Basis in Law.**

6 Removal “is an extreme and extraordinary measure, intended only for extreme and
7 extraordinary occasions.” *Jones v. Eighth Jud. Dist. Ct. of State*, 67 Nev. 404, 418, 219 P.2d
8 1055, 1062 (1950). A public officer “who refuses or neglects to perform any official act in
9 the manner and form prescribed by law, or who is guilty of any malpractice or malfeasance
10 in office, may be removed therefrom...” NRS 283.440(1). The officer must have
11 substantially failed to perform their legal duties or intentionally committed a wrongful act
12 directly related to their duties. *Id.*; *Jones*, 67 Nev. at 408, 219 P.2d at 1057; *Schumacher v.*
13 *State ex rel. Furlong*, 78 Nev. 167, 172, 370 P.2d 209, 211 (1962). Where there is no official
14 duty to act prescribed by law, there can be no removal. *See* NRS 283.440(2); *Schumacher*, 78
15 Nev. at 172, 370 P.2d at 211(citations omitted).

16 Beadles states generally, “Defendants... failed to fulfill the duties of their respective
17 offices as alleged herein.” *Compl.* at ¶91. Beadles identifies no specific duty for which
18 Defendants individually committed malpractice nor neglect. Beadles alleges that, “By
19 failing to address the Petitions, Defendants have each violated their oath to office, Nevada
20 Revised Statutes and Administrative Codes, and violated the Plaintiff’s constitutional
21 rights.” *Compl.* at ¶46. As set forth above, there is no specific duty requiring Defendants to
22 respond or address any of Beadles’s “petitions.” NRS 293.2546(11); NAC 293.025.

23 Beadles also states, “Defendants have additionally failed to address, correct, or
24 rectify the issues raised in the underlying Petitions, including but not limited to, (1)
25 updating and resolving the voter registration lists; (2) providing proper vote counting
26 mechanisms; (3) counting votes in secret; (4) inadequate signature verification; (5) illegal

1 function within the election system; (6) violations of election procedures as required under
2 Nevada law. [Exhibit 109].” *Compl.* at ¶91; *see also Compl.* at ¶¶46–51.

3 The removal claim is not warranted by law. Beadles does not identify a specific legal
4 duty for each of Commissioner Hill, Manager Brown, and Ms. Rodriguez. Beadles
5 erroneously takes the position that his disagreement with Washoe County’s election
6 procedures warrants removal of public employees. This claim is presented without a legal
7 basis and sanctions are warranted.

8 **vi. Punitive Damages are Unavailable for State Law Claims.**

9 Nevada law prohibits awards of punitive damages against government entities and
10 employees. NRS 41.035(1). “An award may not include any amount as exemplary or
11 punitive damages.” *Id.*

12 In the present case, Beadles alleges he is entitled to punitive damages in his state law
13 tort claims. As a matter of law, he is not. Beadles’s pursuit of punitive damages in state law
14 claims is unwarranted by law.

15 **vii. Beadles’s Relief Requests Demonstrate Frivolity.**

16 The Court “cannot recognize a remedy absent an underlying cause of action.”
17 *Badillo v. American Brands, Inc.*, 117 Nev. 34, 41, 16 P.3d 435, 440 (2001).

18 The Complaint requests unavailable relief, including invalidating provisions of the
19 NRS, requiring Defendants use paper ballots, “[e]njoin the Defendants and make the
20 digitized vote tally database (Microsoft SQL) open for public inspection,” require
21 Defendants disclose applicant name and credentials, prohibit Defendants from using QR
22 codes, “halt” Defendants’ expenditure of “unapproved and unsafe equipment and
23 software.” The relief request is detached from any causes of action.

24 Beadles’s relief request is frivolous, and suggests that the Complaint was filed for an
25 improper purpose rather than to resolve legitimate legal claims.

26 //

1 **E. BEADLES DISREGARDED DEFENDANTS’ RULE 11 NOTICES.**

2 Beadles was notified of his Rule 11 violations as early as August 8, 2023, in a Rule
3 11 letter and proposed motion for sanctions served in his first case. Ex. 1 at ¶2. Though he
4 withdrew his federal action, he continues to pursue two identical claims in this action, the
5 same allegations, and the same named Defendants. He was again notified of his Rule 11
6 violations and declined to rectify the same. Ex. 1 at ¶3.

7 His failure to address even the most obvious Rule 11 violations further demonstrates
8 his improper purposes in pursuing this case. Beadles has no interest in adhering to the law
9 or the rules of this Court. Instead, Beadles merely seeks to use the judicial system to harass
10 Defendants and legitimize his unfounded theories.

11 **F. SANCTIONS ARE APPROPRIATE, INCLUDING DISMISSAL, A MONETARY**
12 **SANCTION, AND ATTORNEYS’ FEES.**

13 The Court may impose sanctions for violations of Rule 11. NRCPC 11(c).
14 Appropriate sanctions may include “reasonable expenses, including attorneys fees, incurred
15 for presenting” the motion for sanctions. NRCPC 11(c)(2). Nevada law further provides for
16 attorney’s fees with regard to claims “brought or maintained without reasonable ground or
17 to harass the prevailing party,” stating:

18 It is the intent of the Legislature that the court award
19 attorney’s fees pursuant to this paragraph and impose
20 sanctions pursuant to Rule 11 of the Nevada Rules of Civil
21 Procedure in all appropriate situations to punish and deter
22 frivolous or vexatious claims and defenses because such claims
and defenses overburden limited judicial resources, hinder the
timely resolution of meritorious claims and increase the costs
of engaging in business and providing professional services to
the public.

NRS 18.010(2)(b).

23 A sanction “must be limited to what suffices to deter repetition of this conduct or
24 comparable conduct by others similarly situated.” NRCPC 11(c)(4). “The sanction may
25 include nonmonetary directives; an order to pay a penalty into court; or if imposed on
26 motion and warranted for effective deterrence, an order directing payment to the movant of

1 part or all of the reasonable attorney’s fees and other expenses directly resulting from the
2 violation.” *Id.*

3 The severity of the sanctions should take into account whether a filing is only
4 frivolous or both frivolous and made for an improper purpose. *Townsend v. Holman*
5 *Consulting Corp.*, 929 F.2d 1358, 1362 (1990). Where, as here, a complaint has no legal basis,
6 an improper purpose may be inferred. *Agbabiaka v. HSBC Bank USA Nat. Ass’n*, Case No.
7 09-05583 JSW, 2010 WL 1609974, at *8) (N.D. Cal. Apr. 20, 2010)(quoting *Paciulan v.*
8 *George*, 38 F.Supp.2d 1128, 1144 (N.D. Cal. 1999). The Ninth Circuit noted that “evidence
9 bearing on frivolousness or non-frivolousness will often be highly probative of purpose.”
10 *Townsend*, 929 F.2d at 1362.

11 Nonmonetary sanctions may also be appropriate. NRCP 11(c)(4). When
12 appropriate, a Court may dismiss an entire offending Complaint. *See Rhinehart v. Stouffer*,
13 638 F.2d 1169, 1170–71(9th Cir. 1979).

14 Reviewing NRCP 11’s federal counterpart, the Ninth Circuit held that Rule 11(b)
15 “explicitly applies to parties not represented by attorneys.” *Warren v. Guelker*, 29 F.3d 1386,
16 1390 (9th Cir. 1994). Thus, a court cannot decline to impose sanctions “where a violation
17 has arguably occurred, simply because plaintiff is proceeding pro se.” *Id.*

18 Beadles violated Rule 11 in signing a pleading containing claims not warranted by
19 existing law or by a nonfrivolous argument for extending, modifying, or reversing existing
20 law or for establishing new law, for forum shopping, and for filing a complaint for improper
21 purposes. Sanctions are appropriate, including a monetary sanction paid to the court, an
22 award of Defendants’ attorneys’ fees and costs, and dismissal of this action.

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Exhibit 6 Beadles’s Post entitled “Over the Hill” 4 pages

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Exhibit 8 Declaration of Jamie Rogriguez1 page

Exhibit 9 *Statement of Contest of the June 14, 2022, Primary Election Pursuant to NRS § 293.407, filed in the First Jud. Dist. Ct. of the State of Nevada in and for Carson City, case no. 22 OC 000851B*194 pages

Exhibit 10 *Order Granting Defendant Joseph Lombardo’s Motion for Summary Judgment filed in the First Jud. Dist. Ct. of the State of Nevada in and for Carson City, case no. 22 OC 000851B* 6 pages

Exhibit 11 *Order Granting Defendant Joseph Lombardo’s Motion for Sanctions filed in the First Jud. Dist. Ct. of the State of Nevada in and for Carson City, case no. 22 OC 000851B* 5 pages

EXHIBIT 1

EXHIBIT 1

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DECLARATION OF SUZANNE HALDEMAN

STATE OF NEVADA
COUNTY OF WASHOE

I, Suzanne Haldeman do hereby declare, under penalty of perjury, the following:

1. I am a Legal Secretary for the Washoe County District Attorney's Office.
2. On August 8, 2023, I deposited a Rule 11 letter and proposed Motion for Sanctions regarding the Complaint filed in Second Judicial District Court case number CV23-01283, removed to the United States District Court District of Nevada, case number 3:23-cv-00382-ART-CSD in U.S. mail, and sent the same to the following email addresses: robertbeadles@protonmail.com; beadlesmail@gmail.com.
3. On August 16, 2023, I deposited a Rule 11 letter and proposed Motion for Sanctions regarding the Complaint filed in Second Judicial District Court case number CV23-01341 in U.S. mail and sent the same to the following email addresses: robertbeadles@protonmail.com; beadlesmail@gmail.com.


SUZANNE HALDEMAN

EXHIBIT 2

EXHIBIT 2



One South Sierra Street
Reno, Nevada 89501

775.328.3200
washocounty.gov/da

Christopher J. Hicks
District Attorney

August 16, 2023

Via U.S. Mail:

Robert Beadles
10580 N. McCarran Blvd. #115, Apt. 386
Reno, NV 89503

Via Email:

robertbeadles@protonmail.com
beadlesmail@gmail.com

Re: *Robert Beadles v. Jamie Rodriguez, et al.; Second Judicial District Court case number CV23-01341*

Dear Mr. Beadles,

Enclosed is a proposed motion for sanctions that will be filed with the Court after 21 days, as provided by NRC 11(c), unless your new Complaint, the Motion to Request Judge Simons, 2nd Motion to Request Judge Simons, Motion to Change Venue, and Motion to Recuse Judge filed in case number CV23-01341, case are withdrawn in their entirety. The Nevada Rules of Civil Procedure, just like the Federal Rules of Civil Procedure has a Rule 11 prohibiting parties from filing for improper purposes, alleging facts without evidentiary support, and for pursuing claims without legal bases.

You filed an improper Complaint, duplicating claims in the first case you filed and then dismissed. This case was filed for improper purposes, including to needlessly increase the cost of litigation and to forum shop. As with the first case, this case was also filed for the improper purpose of harassing and vexing Commissioner Hill, Manager Brown, and Jamie Rodriguez. Each of these are improper purposes in violation of Rule 11.

As set forth in detail in the proposed Motion, your claims continue to lack basis in law and fact. Oddly, you continue to pursue claims against the Office of the Registrar of Voters, which is not a suable entity. Your removal claim fails to set forth any actual malfeasance or nonfeasance of an official duty to act. As you were previously informed, there is no obligation for any of the Defendants to respond to your "petitions." Elections-related complaints are handled by the Secretary of State, who has a duty to *resolve* – not necessarily respond – to those complaints. You were previously put on notice that your claims violated Rule 11. Your continued pursuit of these claims demonstrates their frivolity and your improper purpose in so filing.

Justice First, People Always



One South Sierra Street
Reno, Nevada 89501

775.328.3200
washoecounty.gov/da

Christopher J. Hicks
District Attorney

Additionally, your two Motions to Request Judge Simons, the Motion to Change Venue, and the Motion to Recuse Judge are inappropriate and without legal basis. Judge and forum shopping is disfavored and sanctionable.

I again offer you an opportunity to withdraw your frivolous Complaint in its entirety before the attached Motion for Sanctions is filed in your duplicative extortionate case. I also offer you an opportunity to withdraw the Motions to Request Judge Simons, Motion to Change Venue, and the Motion to Recuse Judge. Pro se parties are not immune from Rule 11 sanctions in Nevada State Courts. NRCPC 11(c)(1) (“the court may impose an appropriate sanction on any...party that violated the rule or is responsible for the violation”).

Sincerely,

CHRISTOPHER J. HICKS
Washoe County District Attorney

By: /s/ Lindsay Liddell
LINDSAY L. LIDDELL
Deputy District Attorney

LLL

EXHIBIT 3

EXHIBIT 3



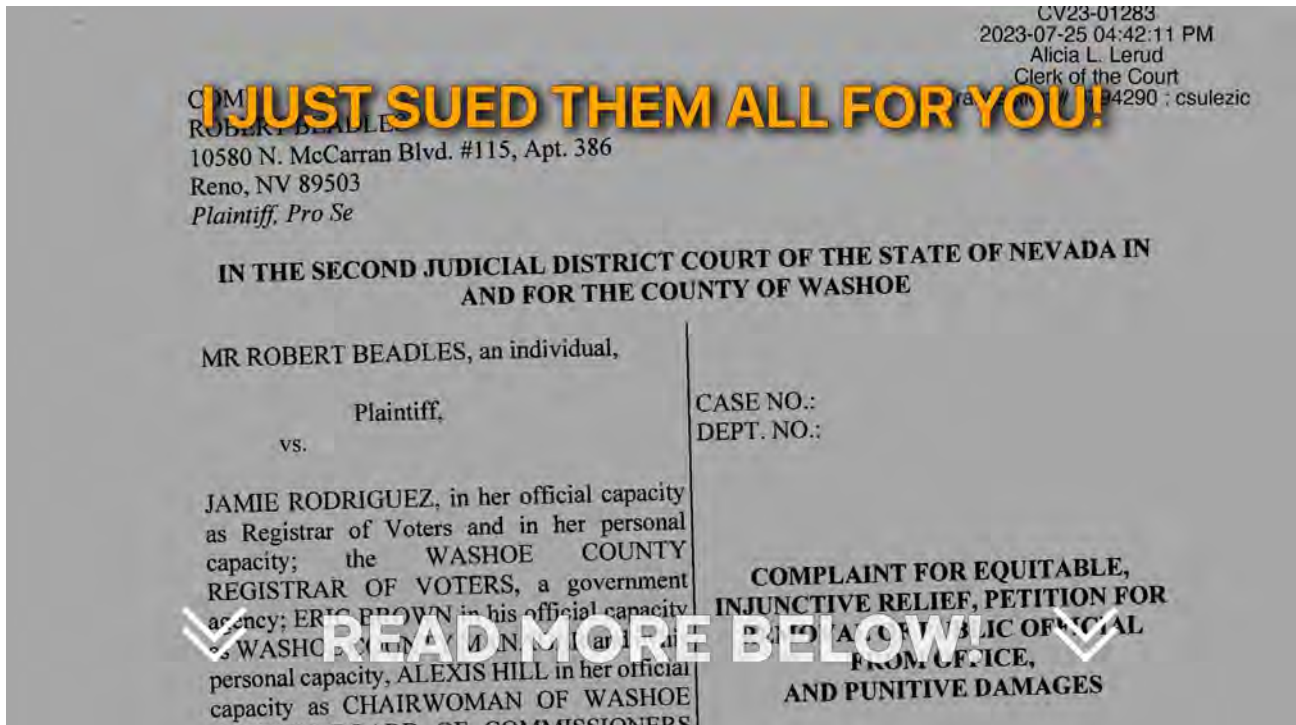
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I Just Sued Them All For You!

by operationsunlight | Jul 26, 2023 | Beadles Bombs

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Listen, folks, I'm taking a stand, putting it all on the line to sue the County Manager, ROV, and Commissioner Chair – in both their personal and official capacities and the whole damn county itself. I'm stepping into the ring on my own. Why? Look around. Lawyers everywhere are being sanctioned and or disbarred for trying election cases. Look at John Eastman in California he's getting sidelined and blackballed for standing up in election cases. I won't let that happen to my legal team.

The majority of us – 60-80%, depending on what poll you look at – say our elections have serious issues. With this lawsuit, I show that our constitutional rights have been trampled over, our concerns unheard, and our lawful petitions thrown aside. But I'm not standing by idle. No, I'm calling them out on every front. Our voter rolls are a mess, uncertified election equipment being used willy-nilly, our votes being counted in secret, a function within our election system is flipping our votes, inadequate signature verification – which is the only real safeguard we have left to make sure our votes are counted legitimately – and damn near every election law there is has been broken.

Just wait, the hard evidence is on its way. I can't put it in the complaint, you don't present a case in a complaint, you present the evidence as the case goes forward. Know that we're dealing with hard facts here, not conspiracy theories. The outcome? That's in the hands of God. It's going to be uphill for sure. To start, I'm suing the very county we demand justice from. I may have to take this all the way to SCOTUS, and I will if I have to. But this case, it's a game-changer, and we'll see what God brings our way.

Rest assured, I wouldn't stake my name, or risk my reputation if I didn't have the proof. What I demand from the court is simple: boot these people out of office and mend our fractured, dysfunctional election system. This is a high-speed ride, folks, so hold on tight and send your prayers our way. A case like this, to my knowledge, has never been attempted. If we can expose the corruption and dysfunction here, we can expose it everywhere. Say some prayers for us all, and let's do this!

Look at the lawsuit here:

COMP
ROBERT BEADLES
10580 N. McCarran Blvd. #115, Apt. 386
Reno, NV 89503
Plaintiff, Pro Se

FILED
Electronically
CV23-01283
2023-07-25 04:42:11 PM
Alexis L. Leitch
Clerk of the Court
Transaction # 9794290 - coulelec

IN THE SECOND JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA IN
AND FOR THE COUNTY OF WASHOE

MR ROBERT BEADLES, an individual,

Plaintiff,

vs.

JAMIE RODRIGUEZ, in her official capacity as Registrar of Voters and in her personal capacity; the WASHOE COUNTY REGISTRAR OF VOTERS, a government agency; ERIC BROWN in his official capacity as WASHOE COUNTY MANAGER and in his personal capacity; ALEXIS HILL in her official capacity as CHAIRWOMAN OF WASHOE COUNTY BOARD OF COMMISSIONERS and in her personal capacity; WASHOE COUNTY, Nevada, a political subdivision of the State of Nevada, and DOES I-X; and ROE CORPORATIONS I-X.

Defendants.

CASE NO.:

DEPT. NO.:

COMPLAINT FOR EQUITABLE,
INJUNCTIVE RELIEF, PETITION FOR
REMOVAL OF PUBLIC OFFICIAL
FROM OFFICE,
AND PUNITIVE DAMAGES

(Jury Trial Demanded)
Automatically Exempt from Arbitration
NAR 5(a)(1)(G)—Declaratory Relief

Plaintiff ROBERT BEADLES ("Beadles"), in proper person, hereby files this Complaint against JAMIE RODRIGUEZ ("Rodriguez") in her official capacity as Registrar of Voters and in her personal capacity; the WASHOE COUNTY REGISTRAR OF VOTERS, a government agency; ERIC BROWN ("Brown") in his official capacity as WASHOE COUNTY MANAGER and in his personal capacity; ALEXIS HILL ("Hill") in her official capacity as CHAIRWOMAN OF WASHOE COUNTY BOARD OF COMMISSIONERS and in her personal capacity;

[Download \[840.66 KB\]](#)

Remember, I sued for you and your family, not just mine, If we can save our elections, we can save it all, and that's the truth, no matter how the corrupt press tries to spin this.

Beadles

P.S.

This isn't about changing past election results; this is about ensuring our votes going forward count legitimately for all legal voters as we cast them, and the people who are failing to do their jobs for whatever reason end up in the unemployment line.

DISCLAIMER:

These thoughts, statements, and opinions are my own, not of any club, committee, organization, etc.

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EXHIBIT 4

EXHIBIT 4



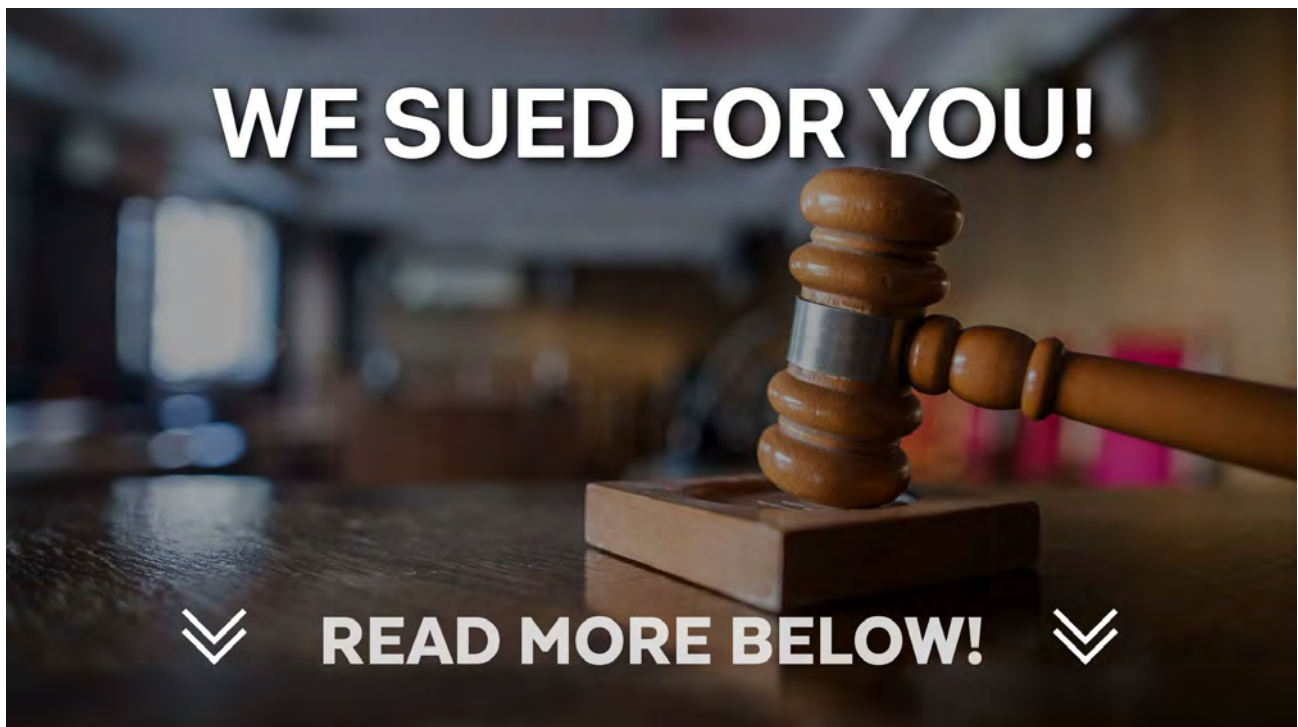
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We SUEd For YOU!

by operationsunlight | Jun 30, 2023 | Beadles Bombs

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This is the first of many lawsuits we're filing.

When someone cannot logically debate with you, they often resort to silencing you, for they fear the power of your words.

Here is the lawsuit:

Case 2:23-cv-01009 Document 2 Filed 06/29/23 Pa

1 **COMP**
SIGAL CHATTAH, ESQ.
Nevada Bar No.: 8264
2 CHATTAH LAW GROUP
5875 S. Rainbow Blvd #203
3 Las Vegas, Nevada 89118
Tel: (702) 360-6200
4 Fax:(702) 643-6292

5 Attorney for Plaintiff
Susan Vanness Et Al

6

7 **THE UNITED STATES DISTRICT COURT**

8 **DISTRICT OF NEVADA**

9 SUSAN VANNESS, an individual,)
ALEXANDREA SLACK, an individual)
10 MARTIN WALDMAN, an individual,)
ROBERT BEADLES,an individual)

11 Case No:

12 Page 1 / 17

[Download \[262.67 KB\]](#)

Introduction:

This is the first of many lawsuits we're filing, and it's a crucial one for you and your way of life. We're taking on SB406, a messed-up law that could land you in jail for four years just for asking why an election worker isn't doing their job. Talk about a complete lack of clarity and an invitation for abuse!

The Problem with SB406:

This bill is so vague that it leaves everything up for interpretation. That means they can twist the rules however they want and silence anyone they please. The media will undoubtedly say our lawsuit is an attack on democracy, but that's just a load of BS.

Protecting our Rights:

Let's get one thing straight – we already have laws to protect people from harassment and stalking. Instead of creating new ones, why not focus on enforcing the existing ones? We can't have Grandma ending up in maximum security just for annoying the guy at the polling place who won't give her a ballot because someone already voted for her. Remember County Commissioner Jeanne Herman? Someone stole her identity and cast a vote on her behalf. When she spoke up, the election worker gave her a hard time until a witness stepped in and vouched for her. If this law had been in place, she could have ended up with a class E felony! I'm not exaggerating here; **this is a serious threat to our freedom.**

Our Broken Election System:

You won't believe what's been going on with our county manager, Eric Brown, aka Eric Brownstain, and the utterly incompetent, who's not competent enough to clean toilets let alone our voter rolls, Jaime Rodriguez, our registrar of voters. They finally admitted that our Washoe County election system is a total mess and needs to be torn down to the studs. And guess who's been saying this for years? You and me, my friends! What if we were silenced and thrown in jail just for speaking the truth?

Defending Free Speech and Democracy:

This unconstitutional bill is a direct attack on our First Amendment rights – our right to free speech and our right to address grievances. Don't fall for the propaganda from those commie news agencies; this is about protecting our voice and our right to vote. And let's set the record straight – we are a constitutional republic, not a democracy. If they want a democracy, they can get the hell out of the U.S.

The Fight Against Injustice:

This is just the beginning. We won't back down. We're not suing Governor Lombardo to play some political game; it's a 1983 case, and we have to follow the process. It's nothing personal. It's just how it has to be done. The same goes with Cisco Aguilar. These two must be sued in their professional capacities. So don't believe the hype or propagandists who



are saying we are trying to split the party, as that's utter B.S. One can not sue the "State" in a 1983 case, they have to sue the Governor.

Don't Let our Voice be Silenced:

This law must be defeated. We can't let them silence us. Don't buy into the propaganda from these commies; this is about protecting our right to vote and our freedom of speech. Our elections are a disaster, and it's time to exercise our rights. Anyone who harms an election worker deserves punishment, but guess what? Laws already exist for that. This bill is a twisted perversion of law under the guise of worker safety.

As Frederic Bastiat said, *"When plunder becomes a way of life, men create for themselves a legal system that authorizes it and a moral code that glorifies it."* We can't let this stand in America. Criminals hide behind laws like these.

Conclusion:

Not one election worker has been assaulted in Nevada, this is straight up the weaponization of our legal system our founders warned us about. It can not stand. Know, this is just the beginning of our battle against SB406. Make no mistake, we will take this all the way to SCOTUS if needed. If they do this in Nevada, they will do it everywhere. We're fighting for our rights, for the integrity of our elections, and for the freedom to speak our minds. We won't be silenced or intimidated. Our goal is to ensure that every American can exercise their right to vote without fear and to preserve the fundamental principles that make our nation strong.

This is the first of several lawsuits we are filing. Enough is enough. Next, we will be suing these so-called servants in their individual capacities. We're coming for the corrupt. We will win. I'm right again.

Beadles

P.S.

You won't believe what we just finally put all the pieces together on. Monday, we will start exposing the people who I've again been right about all along. You wanted proof, it's coming.

P.P.S.

Here's the Nevada Globe's article on our lawsuit against SB 406:

<https://thenevadaglobe.com/fl/exclusive-lawsuit-filed-against-lombardo-and-aguilar-over-election-worker-protection-bill>

Nevada Globe

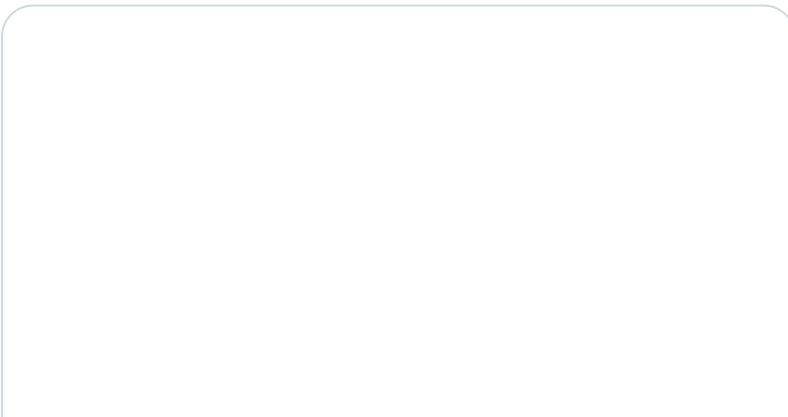
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A little early for fireworks, but...

EXCLUSIVE: Lawsuit filed against [@JosephMLombardo](#) [@CiscoAguilar](#) over "Election Worker Protection Bill" [#SB406](#)

Plaintiffs: law is subjective, broad & "election worker" is undefined. Conflicts with NV law and [#1A](#).



thenevadaglobe.com

EXCLUSIVE: Lawsuit Filed Against Lombardo and Aguilar Over Election Worker Protection Bill - Nevada...

5:25 PM · Jun 29, 2023



21



Reply



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DISCLAIMER:

These thoughts, statements, and opinions are my own, not of any club, committee, organization, etc.

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EXHIBIT 5

EXHIBIT 5



Must Read & Share: Treason

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Comrade Hill-Insky

by operationsunlight | Apr 22, 2023 | Beadles Bombs

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Howdy folks, our so-called elected county commissioner, Comrade Alexis Hill-Insky, who allegedly beat beloved county commissioner Marsha Berkbigler, is showing her full-blown commie agenda.

From what we're told by Democrats and what we see here in the [NRS](#) and in the [AG's OML Manual](#), it appears they maybe right!

Comrade Hill-Insky doesn't want us, the people, to show up and speak out against her bringing in the Soros-affiliated Elections Group.

Who is the Election Group? [Here is a small taste.](#)

Now what's interesting is this initial move to bring in the Elections Group was defeated on 3/28/23 but then we're told it was brought back illegally on 4/11/23 and then approved with the help of a vote by newly appointed County Commissioner, Andriola, who is a registered Republican but has voted in lockstep with commies Hill-Insky and Mariluz "*I sometimes live within my district when I'm not banging your man too*" Garcia.

Can someone remind Andriola she is supposed to vote with the Republicans, please? Maybe instead of experiencing gender delusion, she is experiencing political party delusion?

But I digress.

So why was it possibly illegal? Well...

Doing a quick search, I was able to find this:

"A motion to reconsider an item that has been voted on pursuant to NAC 385B.122: (a) Must be made during the same meeting the vote was cast for the item; and (b) May be made only by a member of the Board who voted affirmatively for the item, if the item was adopted, or negatively for the item, if the item was not adopted. 3. A motion to rescind an item specified in subsection 2 may be made at any time by a member of the Board. 4. Except as otherwise provided in this subsection, a person may address the Board for not more than 5 minutes concerning any motion under consideration by the Board."

Now, I'm not an attorney, but if that needed to happen to bring all those defeated items back on the next agenda, it sure doesn't seem like it happened to me.

What could this mean if they are right?

It could mean that Hill, Garcia, and Andriola, where they all voted to overturn the defeated items and bring back all the pork spending on the Cares Campus, bringing in the Elections Group, etc., may just be illegal, as we're being told!

If so, how does this go unaddressed?

Do they plan to sweep this under the rug like Brown Stain's BS Budget and where all the money really goes?

Now back to Comrade Hill-Insky.

At the liberal-at-best RGJ, they, as usual, throw cover for all things county or elections. This time it was for Comrade Hill-Insky, saying and I quote, "*I do believe this is the right way to run a meeting - I think this is the right move for our county,*" then she goes on to say, "*But things can always change so we'll take it one day at a time.*"

Full stop, so disregarding the will of the people, potentially breaking the law, is the right move for We the People?

Things can change, so we'll take it one day at a time?

Does she not know the NRS requires proper notice to We the People? She's just going to work with Eric Brown Stain and change things day by day?

This is what you would expect from a commie, hence her new name forevermore, Comrade Hill-Insky.

Now to make things worse, according to the NRS, her actively being a commie and having Soros-affiliated people show up en masse could very well be against the law.

Read the NRSs here.

NRS 203.010-119

This isn't the first time she's told people and groups to show up in opposition to us locals, either.

As you can see from the below information request, she is asking for people to show up and speak out against free and fair elections!

As you can see, Comrade Hill-Insky asked the Washoe Dems, and God only knows how many other groups to show up, don't take it from me. Read her own words for yourself.

Att'ments	Serial	Subject
*	109	Inbound Meeting links for morning/afternoon session of PIT Count (volunteer) Briefings
*	110	Inbound Meeting links for morning/afternoon session of PIT Count (volunteer) Briefings
*	111	The article I referenced yesterday
	112	Re: Date for Screening and Panel of Misdemeanor Film
	113	Date for Screening and Panel of Misdemeanor Film
*	114	2nd Public Workshop NAC 62B and NAC 62H
*	115	2nd Public Workshop NAC 62B and NAC 62H
	116	Re: Action Alert! Voting Rights Under Attack in Washoe County!
	117	Equal Housing Opportunity Newsletter

From : [REDACTED] 265
To : Hill, Alexis
CC :
Subject : Re: Action Alert! Voting Rights Under Attack in Washoe County!

Message Preview **Attachments**

On Feb 17, 2022, at 7:26 AM, Hill, Alexis <AHill@washoecounty.gov> wrote:

Hey [REDACTED]

I asked for the Dems to send this message out. I've been working to get the word out on this since I saw the resolution on our agenda yesterday. Please forward to your friends and respond to the call with your opposition. Thank you for your engagement. We need you now more than ever with folks trying to take away our voter rights!

Thanks!

Alexis Hill

Now I'm just giving you a taste, we'll give you much more later, but for now, this alone shows she was working with groups to bring about opposition! NOT discussion. She's supposed to be a commissioner, not an activist! If something bad happened, someone were to get hurt, someone to storm the building, it would ALL be on Comrade Hill-Insky as seen there in her own words! How is this not grounds for removal alone?

Don't worry. We have sooooo much more, in case it's not 😊

Now we know that at that meeting, Soros-funded people showed up for \$60 an hour, according to the great Hope, as seen [here](#) in her exposing it during public comment with the fliers from the Soros-funded group.

In case you don't know why Soros is such a bad guy, listen to him here on 60 minutes say what he did to his own Jewish neighbors, with no regrets! This is his origin story, it only gets worse from [here](#)!

To digress for a second, I'm sure you know, we still have the **UNDEFEATED \$80,000 challenge** to prove us wrong about our broken elections. In these documents, you will also see Comrade Hill-Insky **DID NOT WIN** against beloved County Commissioner Marsha Berkbigler. We know in communist countries, elections mean little. We saw that here in 2020 in the Hill vs. Berkbigler race. But guess what...

Marsha Berkbigler is running against Comrade Hill-Insky NEXT YEAR, and this time, it's

going to be much harder for Hill-Insky to have the “help” she previously received.

Berkbigler will wipe the floor with Hill-Insky, I promise you.

Now back to breaking open meeting laws, as you know, she doesn't allow clapping either. At least when it's not in her favor. This too is apparently a violation of the NRS and Open Meeting Laws, as seen [here](#) and [here](#).

There are also numerous court cases that say the same.

[Here's one for you as well.](#)

But commies do what commies do, so we sent the information to Assistant District Attorney Edwards and all the County commissioners this morning in hopes they will save us from the commies.

I believe Mr. Edwards has been put in a tough spot over the years by these people and has done the best he could. Know that I have much respect for Assistant DA Nathan Edwards and hope he does right by us all. You know me, I don't butt-kiss; I just tell it the way it is. If someone does good, I'll praise them; if they do us wrong, I'll condemn them. I believe it's easier just to always tell the truth. I do respect him.

See the emails we sent here below:

From: **Robert Beadles** <REDACTED>

Date: Fri, Apr 21, 2023 at 10:27AM

Subject: Alexis Hill Violations

To: <nedwards@da.washoecounty.gov>

Cc: Clark, Mike E. <MEClark@washoecounty.gov>, Herman, Jeanne <JHerman@washoecounty.gov>, Hill, Alexis <AHill@washoecounty.gov>, Garcia, Mariluz C. <MCGarcia@washoecounty.gov>, <CAndriola@washoecounty.gov>

Good morning,

Mr. Edwards, and commissioners, it has come to our attention via several first-hand witnesses that Alexis Hill is potentially trying to incite a disturbance or potential riot, according to NRS 203.010-119.

These potential crimes go from misdemeanor to felony not to mention a violation of her oath of office.

We are told, and the witnesses are happy to testify, that she has been reaching out to numerous groups to show up to Tuesday's commissioner board meeting in support of the George Soros-linked Election Group.

Why in the world would a so-called elected official do this?

For countless reasons, I can't state how inappropriate and concerning this is. We would appreciate you addressing this ASAP.

Additionally, Alexis Hill is violating our First Amendment rights, our rights prescribed through the open meeting laws of the AG, and NRS statutes that allow clapping. There are countless court rulings and case files I can cite if needed to show she is acting as a dictator, not a chair for the commissioner.

Her actions are quite concerning, and we have over 700 people who are willing to file a class-action lawsuit against her personally and the county.

This behavior is inexcusable.

Please address these tremendous issues and get back to us ASAP.

From: **Robert Beadles** <REDACTED>

Date: Fri, Apr 21, 2023 at 11:45 AM

Subject: Open Meeting Violation

To: <nedwards@washoecounty.gov>, <nedwards@da.washoecounty.gov>

Cc: <CAndriola@washoecounty.gov>, Garcia, Mariluz C.

<MCGarcia@washoecounty.gov>, Herman, Jeanne <JHerman@washoecounty.gov>, Clark, Mike E. <MEClark@washoecounty.gov>, Brown, Eric P.

<EPriceBrown@washoecounty.gov>, Hill, Alexis <ahill@washoecounty.gov>

Mr. Edwards,

In addition to the previous email, it appears Eric Brown has removed opening public comment from **Tuesday's meeting**. This is in violation of the **NRS 241** as well as the **AG's Open Meeting Manual** as well as many court cases that could be cited.

Please add the opening public comment back to the agenda as required by law. We also request a full investigation into every penny Eric Brown has touched of taxpayers' dollars since his time at the county.

I appreciate your attention to this, truly – we do. Please address and respond immediately. Thank you in advance.

Now, as I've mentioned before, I have numerous Democrat friends, many of whom are more conservative than some so-called Republicans, and they all tell me Comrade Hill-Insky has lost her mind and is not representing them.

Many of them believe there should be open dialogue between the people and public servants, and what Hill-Insky just did, they don't support it or Comrade Hill-Insky anymore.

So now, it's up to us to continue to keep peaceful pressure on the board, the DA, and Hill. Let's remind them all peacefully that Brown Stain needs to be fired and investigated, and Hill-Insky needs to be investigated and removed if she's breaking the law.

Obviously, Commissioner Andriola needs to vote with the Republicans. Let's see if she does this time around. If it's even allowed to be voted on! Who knows, maybe the Democrats are right, and the new votes on all the defeated items should have stayed defeated! We'll see!

On this coming Tuesday, we'll see if Hill-Insky and Brown Stain possibly break the Open Meeting Laws right in front of us all by not allowing clapping, moving opening public comment, and by even allowing a vote on the Election Group, etc., as we're told it was defeated, and her and Brown Stain bringing it back possibly wasn't legal!

I look forward to seeing you Tuesday. If you can't make it, let the County know how you feel by emailing here:

Washoe311@washoecounty.gov

Or call and leave 3 minute or less message here:

(775) 328-2003

But both must be done by Monday at 4 pm.

One last thought, how in the world do Eric Brown Stain and Comrade Hill-Insky have the power to silence 500,000 Washoe residents? Does that seem like America to you?

It sure doesn't to me. Let's send these two packing.



Remember, no clapping once we do 😊

Beadles

P.S.

We have so much sunlight we will be putting on these so-called public servants. You got a taste this week. If you didn't read those 6 or 7, **do it now**. Next week will be very revealing as well.

Sorry for the format of this post, I did it very rushed, I know it's a bit sloppy, but you deserve to know what's going on as you certainly won't get it from the local propaganda papers.

See you Tuesday!

1001 East 9th Street, Reno

9:30am until whenever

ALSO, let's support SB 405, to help clean up our elections. This is common sense stuff, anyone against it is a commie.

Let our legislators **add it to the hearing and pass it**.

DISCLAIMER:

These thoughts, statements, and opinions are my own, not of any club, committee, organization, etc.

Follow Us On:



EXHIBIT 6

EXHIBIT 6



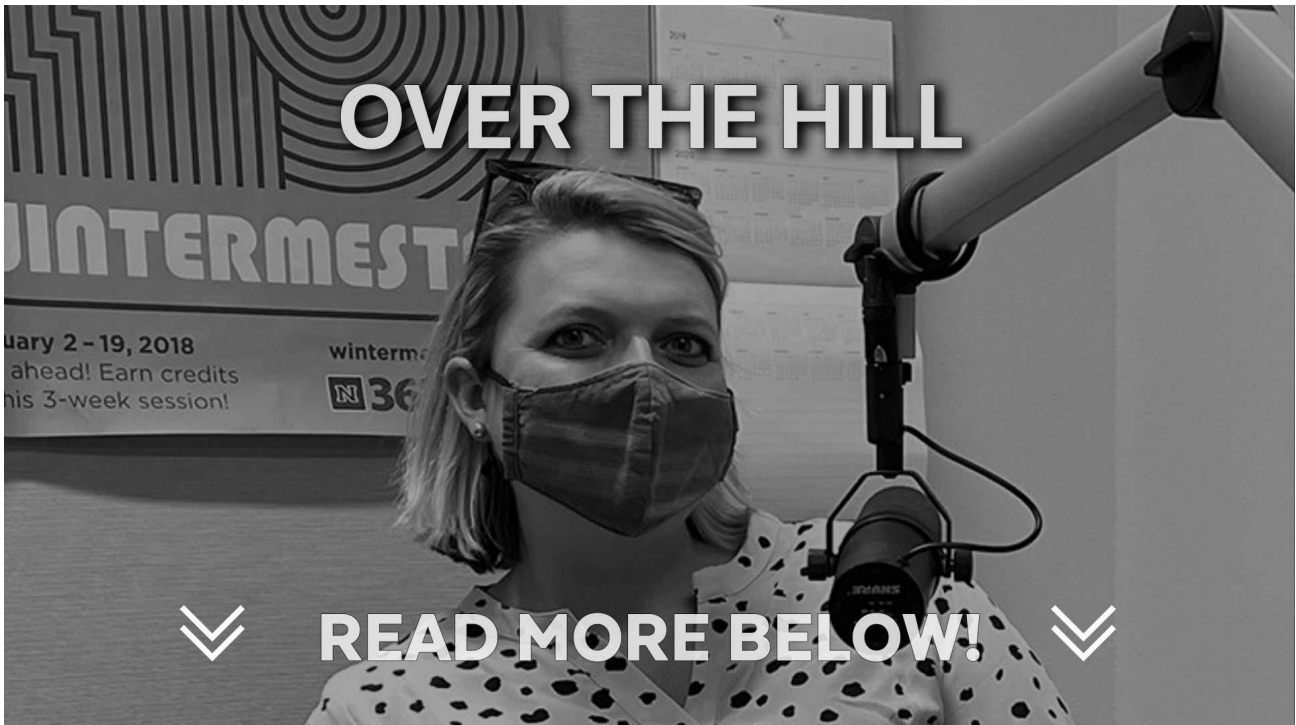
Must Read & Share: Treason

Read Here

Over The Hill

by operationsunlight | Aug 14, 2023 | Beadles Bombs, Who is Alexis Hill

Share This Content



Someone recently nudged me to watch an interview featuring Commissioner Hill on “Nevada News Makers” with host Sam Chad. The buzz was that it was a must-see. They were right.

<http://www.nevadanewsmakers.com/video/default.asp?showID=3857>

From the onset, it felt like watching an episode from a poorly-scripted weird energy skit. Hill, with her forced smile, radiated a bizarre, totalitarian Kermit The Frog-type energy. But, as laughable as that was, it wasn’t the crux of my concern.

Throughout the “interview,” Sam seemed to spoon-feed Hill what looked like highly-scripted questions. But the façade cracked multiple times. For instance, Hill unashamedly mentioned her passion for “gaveling down” citizens at commissioner meetings, denying them their chance to speak. I always thought the chair of a meeting was to facilitate, not suppress?

She didn’t stop there. Hill cast wide aspersions, labeling critics of Manager Eric Brown’s subpar performance as racists! She unflinchingly acknowledged that she was the architect behind silencing opening public comments, supposedly for more “efficient” county business. Yet, from my perspective, these meetings often seem less about the county’s citizens and more about channeling huge sums to dubious beneficiaries – possibly linked to her or other commissioners.

The icing on this distasteful cake was her proclamation about lobbyists needing to disclose their identities and affiliations with Eric Brown. Disclosure? I’m all for it. But here’s the catch: Hill’s remarks subtly hint that those attending the commissioner meetings might be pocketing a check. This assertion is not just absurd but insulting. Many attend these meetings, sacrificing their personal time and commitments to voice their concerns. To insinuate, they’re there for monetary gain is delusional and disgraceful.

This feigned concern is even more glaring when you consider our previous revelations. Our past posts highlighted how Hill was orchestrating resistance against Vice Chair Commissioner Herman’s election integrity resolution. We’ve got the receipts. Many who attended were being compensated \$60 an hour, with some associated or employed by organizations directly benefiting from Hill’s interventions. Her people were shuttled in, fed, and facilitated by far left-leaning organizations. Where are their lobbyist badges? The audacity of accusing innocent folks while being complicit in the very act is appalling.

The interview, scripted as it might be, inadvertently cast the sunlight on the real Alexis Hill. To both Democrats and Republicans of Washoe, her true colors shone. I'm positive she is on the fast track to a resounding electoral defeat. And Marsha Berkgigler? She's primed to stomp Hill in a straight-up, fair contest at the ballots box. Don't believe me? Watch the interview. She's done.

Come Tuesday, let's rally. Peacefully speak out against Hill's attempts to muzzle public comments. Remind both Hill and Brown about Commissioner Clark and Herman's bid to restore public comments on the agenda. Let's see which commissioners vote to restore the people's First Amendment vs trample it. Let's also challenge the atrocious decision to outsource our ballots when Nevada can manage every step of our election processes in-house and in-state. We've additionally learned that Vice Chair Commissioner Hermans' equal representation election committee proposal has been torn apart and stuffed back together with communist intentions. What was meant to ensure transparency and representation has been taken over, neutered even. Say a loud "no" to this election committee and the ballot outsourcing. Put your peaceful foot down on agenda items 13,14,15 and tell the commissioners to vote NO.

It's time for a change of leadership. I'm over the Hill, how about you?

Beadles

P.S.

Catch up on the meeting agenda for this coming Tuesday here:

<https://operationsunlight.com/2023/08/11/more-outsourcing-why-we-can-do-it-ourselves>

Show up this Tuesday at 9:45 am

1001 E 9th Street

Reno

DISCLAIMER:

These thoughts, statements, and opinions are my own, not of any club, committee, organization, etc.

Follow Us On:



EXHIBIT 7

EXHIBIT 7



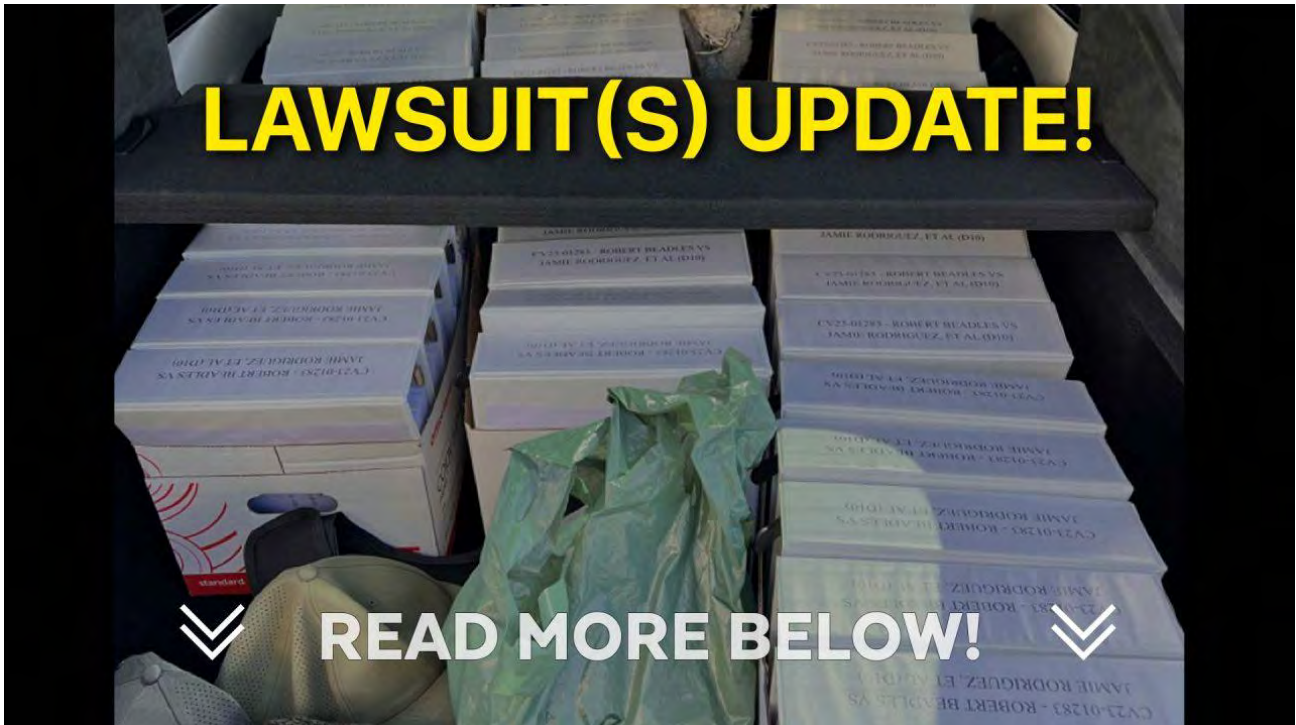
Must Read & Share: Treason

Read Here

Lawsuit(S) UPDATE!

by operationsunlight | Aug 9, 2023 | Beadles Bombs, Who is Alexis Hill, Who is Eric Brown

Share This Content





No evidence, they say? Here's just the first round of evidence. Bet you didn't know a Tesla's trunk and back seat area makes a decent pickup truck bed 😊 The dog already knew; you can see her ever-confident smile a mile away.

So, I'm sure by now you have seen the County yet again use the media to try and discredit us. This latest round by the County and RGJ would make Hitler blush. People all over have told me, "Wow, you really have them scared. I've never seen such an unprofessional, unethical, unAmerican attack on a citizen. All you're doing is pointing out the elections are rigged and some people need to be removed from office." They state they can't believe the

DA's office would do something so woke and so sanctionable. I laugh as they say all this because I know it's in God's hands, and people are just showing us who they are.

We know what our eyes have seen and ears have heard. We know what the data and evidence show, and we know they are terrified of the truth getting out. We are over the target. Just as the picture depicts, that's just round one of the evidence. I would never do what I do if I didn't have the receipts. This game they are playing now is all about trying to discredit me and keep me out of court. It's not going to work.

Here's a super brief recap as to where I am in the filings:

I filed a 4-cause complaint on 7/25/23; the court had 10 days tops to issue citations to the County, the ROV, The Manager, and the Commission Chair. On day 9, the DA did what is called a Notice of Removal and kicked my case to Federal Court. I can't appeal their decision to stay in State Court by arguing the facts in State Court. I would have to do what's called a Motion to Remand in the Federal court to bring it back to State court. That could take months, even years.

So on 8/4, I filed a new lawsuit and only incorporated 2 State causes of action, with no Federal causes of action. This way, I would stay in State Court as that's where I want to be right now, and that's where remedies need to take place.

Yesterday, the RGJ, in conjunction with the County, released a draft Motion for Sanctions against me they plan to file in Federal Court, after 21 days. It's quite laughable as I didn't want to be there anyway; they sent me there! The sad part is it's not public record; it means the County shared the draft document with the media. It's NOT public record, as they stated. Another lie, and another glaring instance of the County working against We The People.

It further shows the county and media are hand in glove in trying to discredit me and keep you from the truth. They are trying to use propaganda and slander to discredit me, and us. This won't work. It's actually a sanctionable offense, and worse, but I am focused on the war and not these little battles.

Now back to the mission.

It's quite simple; I need to be in state court as the 2 main causes of action I seek are the removal of the ROV, County manager, and County Commission Chair and to expose our election issues, then correct them. Period.

Sure, I can go to Federal court afterward, but first, let's sort this County crap out and focus on our courts here, first.

So when you see me dismiss the Federal lawsuit, it's solely because I want to focus on the State Courts first. I never asked to go to Federal Court; they thrust me there and then tried to sanction me for being there. It's quite funny and all theater, hoping you don't understand what's happening. But I do.

Regardless, don't buy into the hype; the evidence and testimony will speak for itself. That's what they fear. Why else slander me? Why else try to shut me up? Why else try to keep me from court? If they are in the right, they would have no problem taking me on head to head in court; instead, they are trying everything they can to keep me out of it. You know it and I know it.

We both know it won't work. The truth is coming; remember these people, remember the RGJ, remember everything they are doing to try to prevent me from sharing the truth with all of you, in court. Watch what happens and remember where all these folks were at in this fight for our right to fair and free elections, and all the crap they talked on us about so-called conspiracies. These people are clueless; when 60-80% of America now says our elections are untrustworthy, you can plainly see who the real deniers and conspiracy theorists are.

My faith is in God and my preparations. I'm ready; we have all the evidence in the world. You give us a jury of my peers, and the truth will not be contained; they will all be exposed for what they are trying to conceal.

Remember, when the media says I dismissed the case, and they try to do some silly victory dance, that was only the Federal case I never asked for. It was their way of buying time and trying to drag this out. I brought us back to the mission and back to the expedited State timeline where we could get justice in less than a month. Watch the State case; don't fall for their BS, stay involved.

“The truth is like a lion; you don't have to defend it. Let it loose; it will defend itself.”

— Augustine of Hippo

Beadles

P.S.

Stay tuned here for updates; you know you won't get the truth from the propaganda

papers.

Oh, and they say my attorneys are drafting my complaints, more lies. Not one of my attorneys has drafted a single document in these cases. These people are desperate to discredit and silence me; it won't work. See ya in court.

DISCLAIMER:

These thoughts, statements, and opinions are my own, not of any club, committee, organization, etc.

Follow Us On:



EXHIBIT 8

EXHIBIT 8

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DECLARATION OF JAMIE RODRIGUEZ

STATE OF NEVADA

COUNTY OF WASHOE

I, Jamie Rodriguez, do hereby declare, under penalty of perjury, the following:

1. I am the Registrar of Voters in Washoe County, and have been performing that role since 2022.

2. Robert Beadles’s claims that Washoe County has “unclean and grossly inaccurate voting rolls,” “unapproved and unsecure voting systems,” that it “fail[ed] to train staff and election officials,” there is “unequal treatment of signatures at the polls,” and there is “illegal function within the election system,” are false statements.


JAMIE RODRIGUEZ

EXHIBIT 9

EXHIBIT 9

COPY

1 CRAIG A. MUELLER, ESQ.
Nevada Bar No. 4703
2 **MUELLER & ASSOCIATES, INC.**
808 S. 7th Street
3 Las Vegas, NV 89101
Telephone: (702) 382-1200
4 Facsimile: (702) 637-4817
Email: electronicservice@craigmuellerlaw.com
5 *Attorney for Contestant Joey Gilbert*

REC'D & FILED

2022 JUL 15 PM 3:02

AUDREY ROWLATT
CLERK

~~C. C. DEPUTY~~

6 **FIRST JUDICIAL DISTRICT COURT**

7 **CARSON CITY, NEVADA**

8 JOEY GILBERT, an individual,

9 Plaintiffs,

10 vs.

11 STEVE SISOLAK, in his official capacity as
12 Governor of Nevada; BARBARA
CEGAVSKE, in her official capacity as
13 Secretary of State; and JOSEPH GLORIA in
14 his official capacity as Clark County Registrar
of Voters. JAMES B. GIBSON, in his official
15 capacity as Chairman of the CLARK
COUNTY BOARD OF COUNTY
16 COMMISSIONERS, and DEANNA
SPIKULA in her official capacity as Washoe
17 County Registrar of Voters and VAUGHN
HARTUNG in his official capacity as Chair
18 of the WASHOE BOARD OF COUNTY
COMMISSIONERS, and JOSEPH
19 LOMBARDO, putative Republican
candidate for Governor of Nevada, and DOES
1-10 and ROES 1-10,

20 Defendants

Case No.:

2022-008517

Dept No.:

7

**STATEMENT OF CONTEST OF THE
JUNE 14, 2022, PRIMARY ELECTION
PURSUANT TO NRS §293.407**

**HEARING DATE REQUESTED
WITHIN FIVE (5) TO FOURTEEN (14)
DAYS. NRS §293.413**

MUELLER & ASSOCIATES, INC.
808 S. 7th Street, Las Vegas, Nevada 89101
Telephone: (702) 382-1200 Facsimile: (702) 637-4817

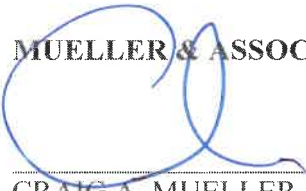
21
22 COMES NOW, Contestant, Joey Gilbert, by and through his attorney CRAIG

23 MUELLER, ESQ. of MUELLER & ASSOCIATES, INC., and hereby files his written statement
24 of election contest, pursuant to NRS §293.407.
25

26 This Statement of Contest is made and based on the following Memorandum of Points
27 and Authorities, and any documents and exhibits which may be attached hereto, and any oral
28 argument this court may allow at time of hearing.

1 DATED this 15th day of July, 2022.

2 MUELLER & ASSOCIATES, INC.

3
4 
5 CRAIG A. MUELLER, ESQ.,
6 Nevada Bar No. 4703
7 808 S. 7th Street
8 Las Vegas, Nevada 89101
9 *Attorney for Contestant, Joey Gilbert*

10 I.

11 **SUBJECT MATTER JURISDICTION**

12 1. Pursuant to NRS §293.407, Contestant Joey Gilbert hereby contests the election of
13 Defendant Joseph Lombardo to the office of Republican Nominee for the gubernatorial
14 election. The court possesses proper jurisdiction of this dispute over the winner of the
15 primary election for the office of Republican Nominee for Governor of the State of
16 Nevada.

17 **NRS §293.410 Statement of contest must not be dismissed for deficiencies of form;
18 grounds for contest.**

19 1. A statement of contest shall not be dismissed by any court for want of form if the
20 grounds of contest are alleged with sufficient certainty to inform the defendant of the
21 charges the defendant is required to meet.

22 The instant Contest is presented in the proper form and the grounds of Contest are alleged
23 with sufficient certainty to inform the defendant of the charges the defendant is required
24 to meet.

25 **NRS §293.413 Time for filing statement of contest; precedence of election contest;
26 referral to special master.**

27 1. The statement of contest provided for in NRS 293.407 shall be filed with the clerk of
28 the district court no later than 5 days after a recount is completed, and no later than 14
days after the election if no recount is demanded.

Recount in Storey County was completed on or about July 11, 2022. This Contest is
timely filed.

1 2. Mr. Gilbert was a candidate in the primary election, held on June 14, 2022, for the
2 Republican Nominee for the General Election for Governor of the State of Nevada to be
3 held November 8, 2022. Defendant Joseph Lombardo was declared the winner of the
4 Primary Election and is now the putative Republican Nominee for the General Election
5 for Governor of Nevada.

6
7 3. The unofficial declaration of the result of the Election and the body or board which
8 canvassed the returns thereof in Clark County occurred on July 1, 2022. The returns of
9 Storey County were canvassed, and the unofficial declaration of the result occurred on
10 July 11, 2022.

11 **II.**

12 **PARTIES**

- 13 4. Contestant realleges all preceding paragraphs as if fully set forth herein.
- 14 5. Plaintiff, Joey Gilbert is a registered voter who resides in Washoe County, Nevada. He
15 has standing to bring this action pursuant to NRS 293.407(2).
- 16 6. The First Judicial District Court has jurisdiction in this matter pursuant to NRS
17 293.407(2), which states, "[e]xcept where the contest involves the *general election* for the
18 office of governor...a candidate...who wishes to contest an election...must...file with the
19 clerk of the district court a written statement of contest..." The Primary Election for the
20 gubernatorial candidate is a statewide election and it is impractical to bring the same
21 contest in each of the Counties in Nevada.
- 22 7. Defendant, Steve Sisolak is the Governor of Nevada and its chief executive officer. He
23 approved Barbara Cegavske's purchase of the vote counting equipment utilized in the
24 2022 Nevada Primary Election.
- 25
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28

- 1 8. Defendant, Barbara Cegavske is the Secretary of State of Nevada who authorized the
2 purchase of the subject vote counting equipment (VCE) utilized in the 2022 Nevada
3 Primary Election and is responsible for overseeing the execution of repairs or software
4 patches and otherwise abiding by federal regulations governing the use of the subject
5 equipment. She caused the "Rules and Regulations for the Conduct of Primary and
6 General Elections Promulgated by the Secretary of State." She also oversees the county
7 election departments and certifies the results of elections.
8
- 9 9. Defendant, Joseph Gloria is the Registrar of Voters in Clark County, Nevada and Deanna
10 Spikula are the Registrars of Voters in Washoe County, responsible, inter alia, for
11 managing the respective County Elections Departments and the execution and
12 management of elections in Clark County and Washoe County as well as implementing
13 the mandates of Barbara Cegavske, Secretary of State of Nevada regarding the VCE.
14
- 15 10. James B. Gibson, Chairman of the Clark County Board of County Commissioners and
16 Vaughn Hartung, Chair of the Washoe Board of County Commissioners are responsible
17 for oversight and management of the Elections Departments in their respective counties.
18
- 19 11. Joseph Lombardo is the putative Republican candidate for Governor in the November
20 2022 General Election.

21 **III.**

22 **OVERVIEW**

- 23 12. The right to vote includes not just the right to cast a *legal* ballot, but also the right to have
24 it *fairly* counted. Article 2, Sec. 1A, (10), (11) of the Constitution of the State of Nevada
25 as ratified by the voters of the state assures us of this right:
26
27 Sec. 1A. Rights of voters. Each voter who is a qualified elector under this
28 Constitution and is registered to vote in accordance with Section 6 of this Article and
the laws enacted by the Legislature pursuant thereto has the right:

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1. To receive and cast a ballot that:

* * *

(b) Accurately records the voter's preference in the selection of candidates.

* * *

10. To a uniform, statewide standard for counting and recounting all votes accurately as provided by law.

11. To have complaints about elections and election contests resolved fairly, accurately and efficiently as provided by law.

13. In this pending Contest, the results of the 2022 Primary Election for the Republican candidate for Governor erroneously indicate that Defendant, Joseph Lombardo garnered the most votes amongst the Republican candidates for the office. Based on a geometric, mathematical analysis of the votes *as counted and announced* by the Counties in Nevada, Contestant, Joey Gilbert disputes this alleged result.

14. In the election contest before this Honorable Court, the Contestant for the Republican nomination for Governor of the State of Nevada, Joey Gilbert, (hereinafter variously, "Contestant," "Joey", or "Mr. Gilbert"), an individual duly registered to vote in Washoe County, Nevada alleges not a political question, but rather a mathematical issue.

15. Mr. Gilbert accepts the votes as counted. However, he will prove that the result as announced is a *mathematical impossibility*. When the votes as counted and announced, are statistically corrected, Mr. Gilbert will demonstrate with irrefutable geometric finality that he handily won the primary election for Republican gubernatorial nominee in the June 14, 2022, Primary Election in Nevada.

IV.

CONTESTANT SETS FORTH SUFFICIENT GROUNDS FOR STATEMENT OF CONTEST AS PROVIDED IN NRS 293.410

16. Contestant realleges all preceding paragraphs as if fully set forth herein.

1 17. This Contest is based upon NRS §293.410 sub. 2. As presented more fully, *infra*,
2 Contestant alleges that the votes as counted and as announced produce a mathematical
3 and geometrically impossible result. Therefore, on information and belief, that the
4 Election Boards made errors sufficient to change the result of the election as to any
5 person who has been declared elected. NRS §293.410 (2) (d).
6

7 18. Contestant alleges, that the ability to generate a geometric and mathematically impossible
8 outcome by reason of the VCE used in the 2022 Nevada Primary Election is sufficient to
9 raise reasonable doubt as to the outcome of the Election. NRS §293.410 (2) (f).

10 **NRS §293.410 Statement of contest must not be dismissed for deficiencies**
11 **of form; grounds for contest.**

- 12 1. A statement of contest shall not be dismissed by any court for want of form
13 if the grounds of contest are alleged with sufficient certainty to inform the
14 defendant of the charges the defendant is required to meet.
- 15 2. An election may be contested upon any of the following grounds:
16 (a) That the election board or any member thereof was guilty of
17 malfeasance.
18 (b) That a person who has been declared elected to an office was not at the
19 time of election eligible to that office.
20 (c) That:
21 (1) Illegal or improper votes were cast and counted;
22 (2) Legal and proper votes were not counted; or
23 (3) A combination of the circumstances described in subparagraphs (1)
24 and (2) occurred, in an amount that is equal to or greater than the
25 margin between the contestant and the defendant, or otherwise in an
26 amount sufficient to raise reasonable doubt as to the outcome of the
27 election.
28 (d) That the election board, in conducting the election or in canvassing the
returns, made errors sufficient to change the result of the election as to
any person who has been declared elected.
(e) That the defendant or any person acting, either directly or indirectly, on
behalf of the defendant has given, or offered to give, to any person
anything of value for the purpose of manipulating or altering the
outcome of the election.
(f) *That there was a malfunction of any voting device or electronic
tabulator, counting device or computer in a manner sufficient to raise
reasonable doubt as to the outcome of the election. (Emphasis added.)*

V.

**DEFENDANTS HAVE FAILED IN THEIR DUTY
TO CAUSE AN ACCURATE REPORTING OF THE
2022 PRIMARY ELECTION IN NEVADA**

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3 19. Contestant realleges all preceding paragraphs as if fully set forth herein.
- 4 20. Defendants, and each of them had a legal duty to the Contestant to cause the accurate
5 reporting of the result of the election results in the statewide Nevada 2022 Primary
6 Election. Defendants, and each of them, breached that duty by failing to provide a
7 mathematical and geometrically correct result of the votes *as counted* and as
8 demonstrated herein.
- 9
10 21. Contestant can prove with an irrefutable mathematical certainty that the actual vote result
11 as counted was miscalculated, is a geometric, mathematical impossibility and that Joey
12 Gilbert, in fact, won his party's nomination for Governor.

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14 **VI.**
15 **THE ANNOUNCED 2022 PRIMARY ELECTION RESULTS ARE**
16 **MATHEMATICALLY, GEOMETRICALLY IMPOSSIBLE**

- 17 22. Contestant realleges all preceding paragraphs as if fully set forth herein.
- 18 23. The Election results as counted and announced are mathematically incorrect.
- 19 24. A mathematical analysis can determine the difference between a fair and an unfair
20 election and where the unfair election is an election for which the results are
21 geometrically infeasible. Contestant, Joey Gilbert will demonstrate that the vote data
22 reporting results need to be corrected and how it needs to be corrected.
- 23 25. In the attached Clark County, 2022, Governor Primary Precinct Analysis ("Precinct
24 Analysis"), we see the effect of the defective vote count on all 2022 Nevada
25 Gubernatorial candidates. The corrected results are *glaring: Joey Gilbert prevails*
26 *dramatically in the Republican race over Joseph Lombardo by more than 50,000 votes.*
27
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1 See, Exhibit "A", "CLARK COUNTY, 2022, GOVERNOR PRIMARY PRECINCT
2 ANALYSIS," by Edward Solomon, dated July 13, 2022.

3 VII.

4 TO DETERMINE THE CORRECT VOTE RESULTS,
5 CONSIDER FIRST THE AGGREGATE
6 PERCENTAGE --A CONCEPT THAT RELATES TWO THINGS

- 7 26. Contestant realleges all preceding paragraphs as if fully set forth herein.
- 8 27. Nevada elections provide for three modes of voting: Early Voting, Mail-in Voting and
9 Election Day Voting; in the Governor's Race, Nevada provided a total of three significant
10 candidates, two Republicans and one Democrat. By force of law, Republicans cannot
11 vote in Democrat primaries, nor can Democrats vote in Republican Primaries; in
12 mathematics we would say the set of ballots belonging to Republicans, and the set of
13 ballots belonging to Democrats, are *Disjoint Sets*, that is, they do not share any ballots in
14 common.
- 15 28. Let us consider only the two Republicans, Gilbert and Lombardo. Each candidate has an
16 Early Vote (hereinafter, "EV"), a Mail-in Vote (hereinafter, "MiV"), and an Election Day
17 Vote (hereinafter, "EDV") total in each precinct. In a fair election, we expect a strong
18 linear correlation between Gilbert's Election Day, Mail-in and Early Vote percentages
19 across the precincts. That is, whatever Gilbert's Election Day percentage is at a
20 particular precinct, we expect both Gilbert's Mail-in percentage and Early Vote
21 percentage to be **roughly** the same, not exactly, since that would imply causation...but
22 **roughly**, which implies a strong correlation, which would be consistent with Clark
23 County's Historical Election Results in all years prior to 2020, both in the Primaries and
24 the General Elections.
- 25 29. However, this is not the case in Nevada's 2022 Republican Gubernatorial Primary. There
26 is absolutely no correlation between Gilbert's Election Day, Early, and Mail-in
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1 Percentages across the precincts. Although this observation is not proof of wrongdoing,
2 this *irregularity* was probable cause to investigate the election results further.

3 30. This investigation revealed a mathematically-illegal geometric formula that governed the
4 proportions between the Early, Mail-in and Election Day ballots across the precincts

5 31. In a fair election, if we know a candidate's Election Day percentage, x , and a candidate's
6 Mail-in percentage, y , and the percentage of ballots cast that were Election Day ballots, z ,
7 then we can solve for that candidate's aggregate percentage share of the combined
8 election day and mail-in vote. The equation that resolves the aggregate percentage is a
9 simple weighted average formula. Let w be the candidate's aggregate percentage, then:
10 $w = zx + (1-z)y = (x+py)/(1+p)$, where p is the proportion of Mail-in to Election Day
11 Ballots cast in the precinct. Either formula remains true whether or not an election is fair
12 or unfair. This law is universal to any four sets of data that share no elements in
13 common, such as the ballot totals of two candidates with two modes of voting.

14 32. However, if there is an illegal formula that allows us to solve for w , with only

- 15 • knowledge of x and y , but without z , that is, any formula that allows us to
16 solve for the candidate's aggregate percentage share of the combined
17 election day and mail-in ballots,
- 18 • knowing only the candidate's election day percentage, and
- 19 • the candidate's mail-in percentage, and
- 20 • without any knowledge of the proportion of Mail-in to Election Day
21 Ballots, and
- 22 • this formula fits all precincts in the County without any variation to such
23 formula,
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1 then, by mathematical definition, this formula allows us to solve the candidate's
2 aggregate percentage share of the ballots in each precinct with no knowledge of the
3 proportion of Mail-in to Election Day Votes, a *geometric impossibility* violating the *Laws*
4 *Which Govern the Proportions of Elements Between Four Pairwise Disjoint Sets*, all of
5 which are geometrically derived.

7 VIII.

8 PAIRWISE DISJOINT SETS

9 33. Pairwise Disjoint Sets are defined in mathematics as any collection of sets, such that all
10 pairings of any two sets from the collection of sets share no elements (ballots) in
11 common.

12 34. For instance, Gilbert's Election Day, Lombardo's Election Day, Gilbert's Mail-in and
13 Lombardo's Mail-in ballots are an example of four pairwise disjoint sets, because a
14 registered voter may cast their ballot once, and only once, in accordance with Nevada
15 State Law. Thus, State Law renders each candidate's Early, Mail-in and Election Day
16 ballots *mathematically disjoint*.

17 35. All of the laws that govern the proportions between four disjoint sets are as follow.

- 19 ○ Let **A** be a set containing a objects.
- 20 ○ Let **B** be a set containing b objects.
- 21 ○ Let **C** be a set containing c objects;
- 22 ○ Let **D** be a set containing d objects.
- 23 ○ Let $x = a/(a+b)$; let $y = c/(c+d)$; let $w = (1-y) = d/(c+d)$
- 24 ○ Let $\alpha = (a+c)/(a+c+b+d)$; $\xi = (b+d)/(a+c)$
- 25 ▪ $\alpha = 1/(\xi + 1)$; $\xi = (1 - \alpha)/(\alpha)$
- 26 ○ Let $\lambda = (a+d)/(a+d+c+b)$; $\Gamma = (c+b)/(a+d)$
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- $\lambda = 1/(\Gamma+1); \Gamma = (1-\lambda)/(\lambda)$
- Let $\Omega = (a+b)/(a+b+c+d); \zeta = (c+d)/(a+b)$
- $\Omega = 1/(\zeta+1); \zeta = (1-\Omega)/(\Omega)$

From which follow the Twenty Laws, which demand that three of the above proportions be known to resolve either two of the remaining proportions:

- Then $x = \alpha + \zeta(\alpha - y) = (\alpha - (1-\Omega)y)/\Omega$
 - $x = \lambda + \zeta(\lambda - w) = (\lambda - (1-\Omega)w)/\Omega$
 - $x = (y(\lambda + \alpha) - \alpha)/(\lambda + 2y - \alpha - 1)$
 - $x = (1/2)((\zeta + 1)(\alpha + \lambda) - \zeta)$
- Then $y = \alpha + (1/\zeta)(\alpha - x) = (\alpha - \Omega x)/(1 - \Omega)$
 - $w = \lambda + (1/\zeta)(\lambda - x) = (\lambda - \Omega x)/(1 - \Omega)$
 - $y = (x(\lambda - \alpha - 1) + \alpha)/(\lambda + \alpha - 2x)$
 - $w = (1/2\zeta)((\zeta + 1)(\lambda - \alpha) + \zeta)$
- Then $\alpha = (x + \zeta y)/(\zeta + 1) = \Omega x + (1 - \Omega)y$
 - $\alpha = (2x + \zeta)/(\zeta + 1) - \lambda$
 - $\alpha = (\zeta(1 - 2w) + \lambda(\zeta + 1))/(\zeta + 1) = \lambda + (\zeta(1 - 2w))/(\zeta + 1)$
 - $\alpha = (\lambda(y - x) - x(2y - 1))/(1 - y - x)$
- Then $\lambda = (x + \zeta w)/(\zeta + 1) = \Omega x + (1 - \Omega)w$
 - $\lambda = (2x + \zeta)/(\zeta + 1) - \alpha$
 - $\lambda = (\alpha(1 - (x + y)) + x(2y - 1))/(y - x) = (\alpha w + x(2y - \alpha - 1))/(y - x)$
 - $\lambda = (\zeta(2w + \alpha - 1) + \alpha)/(\zeta + 1)$
- Then $\zeta = (x - \alpha)/(\alpha - y) = (1 - \Omega)/\Omega$; $\Omega = (y - \alpha)/(y - x) = 1/(\zeta + 1)$
 - $\zeta = (2x - (\alpha + \lambda))/(\alpha + \lambda - 1)$
 - $\zeta = (x - \lambda)/(\lambda - w) = (1 - \Omega)/\Omega$; $\Omega = (w - \lambda)/(w - x) = 1/(\zeta + 1)$

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▪ $\zeta = (\lambda - \alpha) / (2w + \alpha - \lambda - 1)$

From which follow the Forty Isometries:

- Let $g = a/(a+d)$; let $h = c/(c+b)$; let $t = (1-h) = b/(c+b)$, then the proportions: $x, y, w, \lambda, \Omega, \zeta$ can be exchanged for $g, h, t, \Omega, \lambda, \Gamma$ respectively, yielding the first score of the Forty Isometries.
- Let $m = a/(a+c)$; let $n = b/(b+d)$; let $q = (1-n) = d/(b+d)$, then the proportions: $x, y, w, \alpha, \Omega, \zeta$ can be exchanged for $m, n, q, \Omega, \alpha, \xi$ respectively, yielding the second score of the Forty Isometries.

36. After an illegal geometric formula has been detected to alter the election results (that is, any formula that allows one to resolve any proportion on the left-hand side of the above twenty equations, or any of the Forty Isometries, without any three of the remaining proportions), a remedy is applied to restore the election results in manner that would most reflect what the results would have been without geometric interference.

IX.

RESTORATION

37. Contestant realleges all preceding paragraphs as if fully set forth herein.
38. The remedy imports the statistical trends that are expected in a fair election, that is, the Early, Mail-in and Election Percentages of a candidate should be linearly correlated and roughly equal, that, is the election day, early and mail-in percentages, when plotted for a candidate, across the precincts, should fall along the diagonal of a cube. That is, when the precincts are plotted in 3D space, the *x*-axis being the election day *percentage*, the *y*-axis being the mail-in *percentage*, the *z*-axis being the early *percentage*, of a particular candidate against any other candidate in the same race, should form an elliptical cloud (a blimp shape), whose length (major axis) runs along the **straight line** $x=y=z$.

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39. In the instance of Clark County's Primary Elections, the Republican Gubernatorial election cannot be restored until the Sheriff's Primary has first been restored. This is because the illegal geometric formula that was invoked to alter the *proportions of ballots cast* between the Sheriff Candidates, also cemented the proportion of Election Day to Mail-in to Early Ballots cast in each precinct, to which all other races, down the entire ballot, had to be conformed.
40. Thus, one cannot restore any election in the 2022 Primaries, unless they first restore the Sheriff's Primary, to obtain the original proportion of Election Day to Mail-in to Early Ballots.
41. Since the illicit geometric formula used to alter the proportions of the Sheriff's Primary, contained Hyt's combined Early and Election Day Vote, as the first and natural input, we know that the true ratio of Early to Election Day Votes is therefore preserved in the ratio of Hyt's Early to Election Day Votes.
42. In a fair election, we expect that the proportion of Early Votes to Mail-in Votes to Election Day Votes, at any particular precinct, will be roughly the same for all candidates, in all races. Since Hyt's Election Day and Early Totals are preserved, we uniformly apply this ratio against the combined sum of election day and early votes in each precinct, to all candidates, in all races.
43. We then use a rotation matrix to restore the relationship of sheriff candidate Robert's Election Day Percentage, Mail-in Percentage, and Early Percentage, against Hyt, to the diagonal of the cube, $x=y=z$, whilst retaining the magnitude of the original vector from the origin to the coordinate of each precinct in this x, y, z space.
44. We also know that Robert's Mail-in Vote, was true and authentic in its proportion to Hyt's Election Day and Early Vote, as Robert's Mail-in Vote was the third and final

1 natural input in the illegal geometric equation used to alter the ballot ratios between Hyt,
2 Roberts and McMahill. By compelling Robert's Early and Election Day turnout of
3 registered voters to follow the concave down parabolic trend of his authentic mail-in
4 vote, against the total percentage of all registered voters who cast a ballot in the Sheriff's
5 Primary, we were able to obtain the correct proportion of Mail-in to combined Early and
6 Election Day ballots.
7

8 45. Furthermore, that the proportion of Robert's Early to Election Day ballots also then
9 matched Hyt's proportion of Early to Election Day ballots, ensuring us that the
10 restoration of Robert's Early and Election Days totals were undoubtedly accurately
11 conformed to what they would have been without geometric interference. Thereby, we
12 ascertain the correct proportion of Mail-in to the combined Early and Election Day Vote
13 of all candidates, in all races, in each precinct.
14

15 46. The ratio of Early to Mail-in to Election Day Ballots was then applied to McMahill in the
16 Sheriff's race and to Gilbert, Sisolak and Lombardo in the Governor's race. From here,
17 the Governor's race can be restored without any more assistance from the Sheriff's race.
18

19 47. We make regular the election day, mail-in and early vote percentages, between Gilbert,
20 sisolak and Lombardo, such that each candidate's election day, mail-in and early
21 percentage vote percentage, against any other candidate, or pair of candidates, is roughly
22 equal, across the precincts, via geometric translation and rotation of the abnormally
23 distributed percentages back to the diagonal of a cube, $x=y=z$.

24 48. It was *originally* reported in the 578 precincts that were analyzed (precincts that had less
25 than 100 total ballots cast were excluded from the analysis) that Gilbert, Sisolak and
26 Lombardo received 28304, 105816 and 55861 ballots respectively. After the restoration,
27 we learn that Gilbert, Sisolak and Lombardo received 83812, 62102 and 44083 ballots
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respectively. In other words, the lion's share of Gilbert's Republican ballots were drawn illegally into Sisolak's ballot totals (primarily his Mail-in Total), upsetting the proportion of Democrat to Republican ballots in all partisan primaries down the entire ballot, which reveals that Republicans cast their ballots in a two to one (2 : 1) proportion with Democrats in the Nevada Primaries, yet the illegal geometrically-altered data transformed the ratio of Republican to Democrat ballots cast into a Four to Five Proportion (4 : 5), effectively diminishing all Republican votes to 4/10 of a vote per voter.

X.

OPINION ON THE SUMMARY REPORT TITLED
"CLARK COUNTY, 2022, GOVERNOR PRIMARY
PRECINCT ANALYSIS

49. Contestant realleges all preceding paragraphs as if fully set forth herein.

50. Dr. Oliver A. Hemmers clarifies the Precinct Analysis which demonstrates the depth of the incorrect, mathematically impossible results arising from the statewide 2022 Nevada Primary Election. See, Exhibit "B", "Opinion on the Summary report titled "Clark County, 2022 Governor Primary Precinct Analysis, by Dr. Oliver A. Hemmers, dated July 2, 2022.

51. Dr. Hemmers provides an explanation of the algorithm applied to restore the 2020 "Baker v. Hartung" Election in Washoe County as well as most vote count restorations, to the announced voter result in the counties in Nevada. We learn from this explanation how to measure the difference between a fair and an unfair election, where an unfair election is

1 an election where the result is predetermined algorithmically--by geometrically
2 impossible, mathematically-illegal formulae which unfairly reported the vote count in
3 Nevada. Based on the irrefutable geometric equations of the vote as reported and
4 successful use of restorative statistical formulae, properly applied in Nevada to the 2022
5 Primary Election vote count the statewide count can be reported accurately.

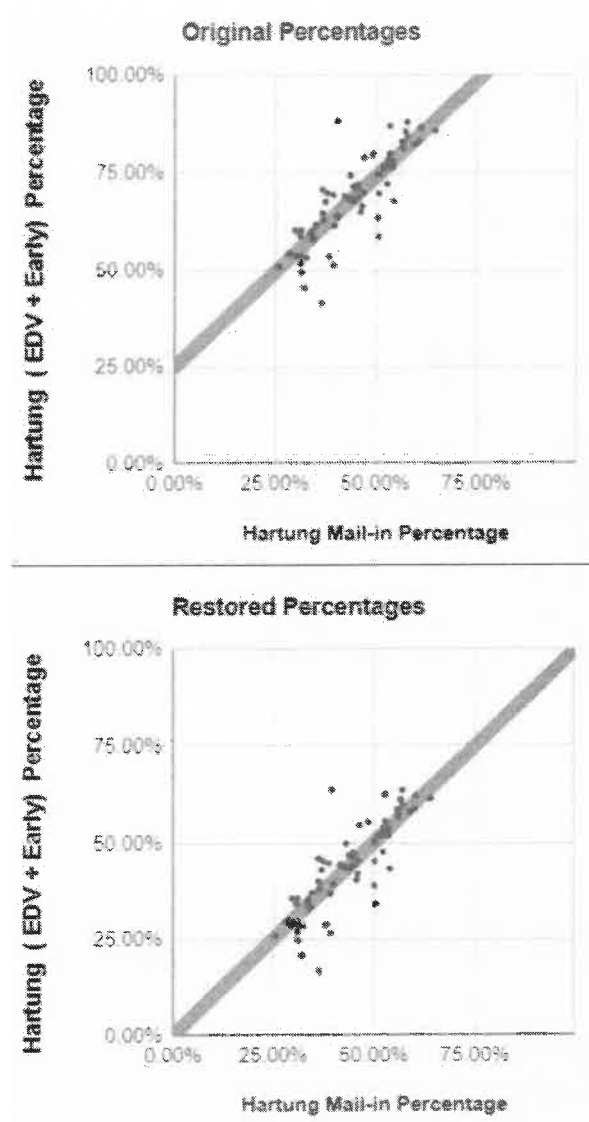
6
7 Dr. Hemmers, in his explanation of the Precinct Analysis, states in full:

- 8 1) The paper under review [1] claims that a mathematical analysis can determine the
9 difference between a fair and an unfair election and where the unfair election is an
10 election for which the results are predetermined algorithmically. It is assumed that
11 causality is a valid assumption during an election where the effect cannot precede
12 the cause, more specific that the *aggregate percentage of votes for a candidate*
13 *cannot precede the election day and mail-in percentages*. This might seem to be
14 a trivial assumption, but it lies at the very core of the analysis.
- 15 2) In the preface of the Clark County, 2022, Governor Primary Precinct Analysis,
16 two examples are presented for a bivariate analysis [2] related to election results.
- 17 3) A bivariate (Two-Variables) is described as follows [2]: The analysis of two
18 specific variables to determine the empirical relationship present between them is
19 referred to as bivariate analysis and it is considered to be one of the simplest
20 forms of quantitative analysis. It is of utmost help when it comes to testing simple
21 hypotheses of association and determining the extent to which it becomes easier
22 to predict the value of one particular variable, given [that] the value of the other
23 variable is already known. There are three main types of bivariate analysis:
- 24 a. **Scatter Plots:** It makes use of dots to represent the values for two different
25 numeric variables. In other words, it provides us with a visual idea of what
26 pattern the variables are following.
- 27 b. **Regression Analysis:** This involves a wide range of tools that can be utilized
28 to determine just how the data points might be related. It tends to provide us
with an equation for the curve/line along with giving us the correlation
coefficient.
- c. **Correlation Coefficients:** This shows how one particular variable moves
about with relation to another.
- 4) In certain cases of bivariate data, one variable is said to determine or influence the
other one. These two types of variables are distinguished as independent and
dependent variables. The former refers to a situation wherein neither of the
variables is considered to be dependent on each other.[2] A simple example is the

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relationship that exists between teenagers reading (independent variable) and their scores in English (dependent variable). **Cause -> Effect**

- 5) The paper specifically uses the bivariate real number plane formula and the West vs. East paradigm to calculate the results as shown in [3,4].
- 6) The Preface concludes with a brief explanation how the election results were successfully restored for the 2020 Election of Hartung vs. Baker [4]. The data and calculations are shown in [4]. The data can be shown in form of two graphs, one is the original data (top), and one is the restored data (bottom).

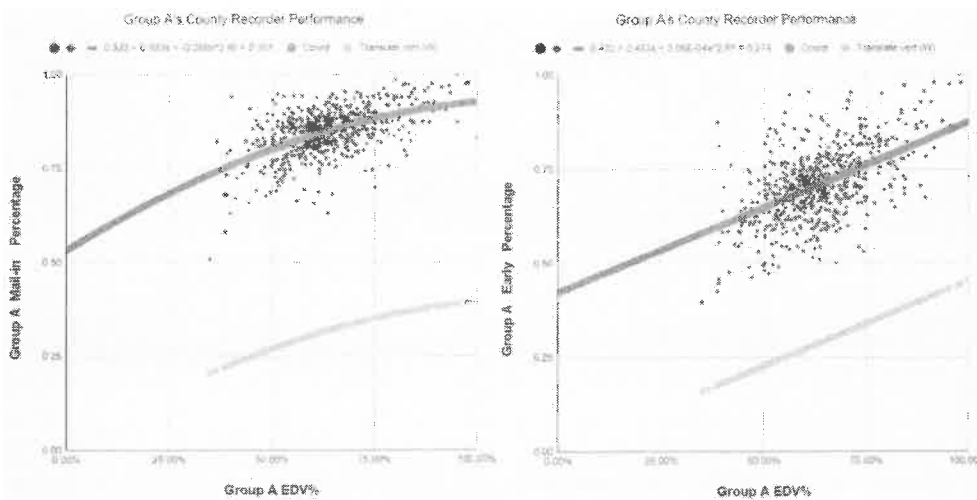


The blue dots represent the results of the individual election precincts, and the red curve is a polynomial (quartic) fit through the blue data cluster. The fact that *in the top graph the red line is not ending at 0%/0% as shown in the bottom graph, means that there is a problem with the election results.* (Emphasis added.) In a

1 fair election the sum of the Early Day and Election Day votes should produce
 2 very similar results to the Mail-in votes, meaning the x-values and the y-values
 3 should be similar (when x is 10% then y should be close to 10% as well) and not
 4 off by 25% [as demonstrated in the top graph].

- 5 a. Even when Hartung received 0% of the Mail-in votes, he would
 6 “magically” receive 25% of the combined Election Day and Early Votes.
 7 This is impossible. Also, should Hartung receive 100% of the Election
 8 Day and Early Votes then Baker would “magically” receive 25% of the
 9 Mail-in votes (100% minus his 75% =25%). Again, this is not possible in
 10 a fair election.
- 11 b. *Even though this discrepancy is not proof of fraud nor an explanation of*
 12 *what type of fraud rigged the election, but it is still possible to correct the*
 13 *numbers and restore the true values, so as if there was a fair election.*
 14 (Emphasis added.) The result is shown in the bottom picture and the
 15 calculated values can be found in [4].
- 16 c. This method of the applied Election Restoration Algorithm has been
 17 successfully used over the past two years not only on Hartung vs. Baker
 18 but also for Maricopa, Philadelphia, Atlanta, Dallas and Tarrant, Macomb
 19 and Oakland, as well as the last federal election.

20 7) The same methods [5] that have been honed and applied to various elections over
 21 the past two years, have been applied to the Group B vs Group A candidates in
 22 the 2022 Gubernatorial Primary [6].



- 23 a. As an example, the Group A data is shown in the two figures above. The blue
 24 dots are from [6], the red curve is a polynomial fit through the blue dots and
 25 the pink line is an extrapolation of the polynomial fit using the shown
 26 equation in the graph. Both have the Election Day vote percentages on the x-
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1 axis. As for the y-axis, the left graph has the Mail-in percentages and the right
2 graph the Early vote percentages. It can be seen that the y-intercepts and the
3 polynomial spines between the two graphs are quite different. Reference [1]
4 shows the restored positions of Group A's Election Day percentage which are
5 virtually the same in both graphs [1].

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- b. In order to be able to restore the original data it is important to identify what part of the data is authentic in order to make the corrections to the illegal data. As written in [1], the illegal equations that govern the percentages of ballots cast between Group B vs Group A, the input percentage is h (as shown on page 3 in [1]), which is equal to Group B's Mail-in vote divided by Group A's combined Early and Election Day votes. From that we know that Group A's Mail-in vote and Group A's Early and Election Day votes are authentic.
 - c. Therefore, you can restore Group A's and Group B's totals and then multiply the individual vote totals of each candidate in each group by the net proportions of change between collectives of Group A and B in each precinct.

11 **Summary**

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- 1) Reference [1] and the included references therein describe how using a restoration algorithm that is based on the well-established mathematical Bivariate Analysis [2] in particular the Bivariate Real Number Plane Formula [5], which has been applied numerous times over the past two years for many US county elections can also be applied to the recent 2022 Gubernatorial Primary in Nevada.
 - 2) For the mathematical restoration of the original data, it is not necessary to claim fraud nor to know any specifics of the fraud.
 - 3) The applied restoration of the official election results shows a significant difference between original and restored election data for all candidates reviewed.

19 See, Report of Dr. Oliver A. Hemmers, attached hereto and made a part hereof as Exhibit
20 "B". Dr. Hemmers C.V. is also attached hereto and made a part hereof as Exhibit "C".

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22 52. Based on the "Clark County, 2022, Governor Primary Precinct Analysis" and the
23 Analysis of Dr. Oliver A. Hemmers of that analysis, Contestant, Joey Gilbert herein
24 demands enjoinder of certification of the 2022 Primary Election results and requests a
25 mathematical recovery of the true vote cast by the voters in Nevada, and, further, that
26 Defendant make the electronic voting machines utilized statewide available for forensic
27 analysis.
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XI.

THE 2022 PRIMARY ELECTION RESULTS
WERE CONTRIVED.

53. Contestant realleges all preceding paragraphs as if fully set forth herein.
54. G Donald Allen states that the Clark County, 2022, Primary Precinct Analysis demonstrates clear and convincing evidence that the election results analyzed therein were not produced by accurate counting of the votes cast, but were instead artificially contrived according to a predetermined plan or algorithm. See, Declaration of Expert G. Donald Allen, attached hereto and made a part hereof as Exhibit “D”, and Curriculum Vitae of Expert G. Donald Allen attached hereto and made a part hereof as Exhibit “E”, Declaration of Expert Walter C. Daugherity attached hereto and made a part hereof as Exhibit “F”, and Curriculum Vitae of Expert Walter C. Daugherity attached hereto and made a part hereof as Exhibit “G”.
55. Dr. Allen states that in his expert opinion, the Primary Precinct Analysis demonstrates clear and convincing evidence that the election results analyzed in these reports were not produced by accurate counting of the votes cast, but were instead artificially contrived according to a predetermined plan or algorithm.
56. Dr. Allen summarizes the salient points of the Primary Precinct Analysis report by Mr. Solomon, simplifying his notation, and clarifying how relatively simple it is to manipulate election outcomes using voting algorithms. He finds that the erroneous tabulation of the vote has two parts. The first is to establish the election is incorrect, and the second is to estimate what the vote total should be. He considers the basic configuration for Candidate A and Candidate B where there are only mail-in and election-day votes. Assume the proportion of the mail-in votes for Candidate A is h .

1 Therefore, the proportion of mail-in votes for Candidate B is $1-h$. The actual vote totals
2 can be computed by multiplying the total number of mail-in votes. Similarly, the
3 proportion of election day votes for Candidate A is k and the proportion of election-day
4 votes for Candidate B is $1-k$. Again, the total votes for each is obtained by multiplying
5 by the total number of election-day votes.
6

7 Now, let M be the number of mail-in ballots and K be the number of votes on election
8 day. Then, the proportion of votes for Candidate A is

$$\frac{hM + kK}{M + K}$$

9
10
11 If voting has been algorithmized by adjusting the proportion of k to a new proportion r
12 the vote total will be the same but the net proportion can be made to whatever, say $r <$
13 0.5 , it is only required to solve the equation

$$\frac{(1-h)M + (1-k)K}{M + K} = 1-r$$

14
15
16 for k . This is done to favor Candidate B. A similar equation is to favor Candidate A. This
17 new value is merely programmed to change votes to obtain the desired proportion.

18 57. Programming this is remarkably simple. Going into any election, if the mail-in data is
19 known, and a good estimate of K is known, the equation has a unique solution. If accurate
20 poll data is known, and it generally is, then all we need is M and we can use the poll
21 estimates to reflect the proportions and then estimate what value k should be to obtain the
22 desired proportion r to be programmed in.
23

24 58. All this is for just one voting station and literally could not be detected. However, if the
25 same or similar proportion obtains over hundreds of precincts, then error is ascertained.
26 That is, plotting the values of h and k of actual election results will reveal that k seems to
27 be constant over all voting stations or precincts.
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59. If there is some control over the total number of mail-in ballots, say by supplementing mail-in ballots after the election-day ballots are counted, then both h and k can be manipulated, to a value where the equation above is solved for h to determine the number of ballots that need to be added. In the absence of both proportions, then poll numbers must be used to fix h and then estimate k based on the desired proportion r .
60. If all mail-in ballots total are known beforehand, and if algorithms are applied as above with differing values of k , massive evidence of error can be detected by noting the proportion of votes for Candidate B generally computes to the same total proportion over the spectrum of reporting stations.
61. In each of these cases, the algorithmic is clear and essentially proved. While a mathematical proof is desired, we are working with field data, and therefore must be replaced with statistical proof for example as applied to forensic psychology.
62. Another, more complex example of algorithmic error, is absolutely clear and convincing when the computed proportions between Candidates A and B do not add up to one. These values we never see, as all reported numbers are lumped together for presentation. Even in the case of newly discovered ballots, we often see total vote proportions change as the count is reported, though this is less indicative of error.
63. How to estimate the votes Candidate A would have if the algorithm flaws did not occur? For this, we use a statistical argument and assume the mail-in proportions, which are assumed to be known and correct are the same as the election-day voting proportions. Alternatively, we know an established relationship between the two. From this, we can back-project to what the values of k should have been for each precinct. These in turn can be averaged in a weighted scheme (by numbers of voters) to gain the average value of k . Using the standard deviation, we estimate the range of all k values within two standard

1 deviations and compute the expected vote count. In this way, the number of votes lost to
2 Candidate A can be estimated. Alternatively, precinct by precinct poll numbers could be
3 used, thus canceling the effects of mail-in voters that are known to behave in different
4 ways from election day voters. Such are standard methods in statistical analysis. In this
5 particular case, they apply to the Gilbert and Sheriff's election results. Solomon uses a
6 geometrical argument, rotating actual results to assumed slope one expectations.
7

8 64. Under all circumstances, the 2022 Primary Election results are mathematically incorrect,
9 and can and should be restored.

10 XII.

11 THE SECRETARY OF STATE OF NEVADA AND THE
12 REGISTRARS OF VOTERS MADE ERRORS SUFFICIENT
13 TO CHANGE THE RESULT OF THE 2022 PRIMARY ELECTION

14 65. Contestant realleges all preceding paragraphs as if fully set forth herein.

15 66. Contestant, Joey Gilbert alleges that the State of Nevada, by and through its Governor,
16 Steve Sisolak, Secretary of State, Barbara Cegavske, the county Election Boards and
17 Boards of County Commission by their, and each of their failures to cause the vote count
18 to be accurate by reason of the lack of accurate vote count equipment and application of
19 illegal geometric and mathematical formulae, made errors sufficient to change the result
20 of the Election. NRS §293.410(2)(d); that putative Republican gubernatorial candidate,
21 Joseph Lombardo has been incorrectly denominated the winner of the Primary Election in
22 that race and the result set aside in favor of Contestant Joey Gilbert.
23

24 67. Contestant alleges that the application of the contrived and illegal geometric formula as
25 set forth herein allowed mathematically illegal and/or improper numbers of votes to be
26 cast and erroneously counted, while legal and proper votes were counted improperly; that
27 the geometric analysis of the error is irrefutable, and that a statistical application of
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standard formula will restore the vote count accurately. NRS §293.410(2)(c).

Constitution of the State of Nevada, Article 2, Sec. 1A, (10), (11).

68. Nevada election law is to be liberally construed to the end that all voters have an opportunity to participate in elections and to cast their votes privately. *See* NRS §293.127. Further, the goal of Nevada election law is to ensure that the will of the voters is not defeated by any informality or by failure substantially to comply with its provisions. *Id.*

69. The Republican Primary race must not be certified.

70. If the Court does not determine to vacate the results of the Republican Primary Election for Governor as requested without a hearing, Contestant prays that discovery may be adduced according to statutory provisions to present a full record to the Court, and thereafter a hearing be set in order to assess the claims made herein.

XIII.

CONCLUSION

71. Contestant realleges all preceding paragraphs as if fully set forth herein.

72. The announced results of the 2022 Primary Election are not, and cannot be properly certified until mathematically corrected, the cost of which to the State is *de minimis*, and particularly so when it involves our most sacred Constitutional right to cast our vote and to have our vote accurately counted.

73. The Nevada Revised Statutes 293 *et seq.* and Nevada Constitution, Article 1, Section 1A, *et seq.* provide for an accurate count of the votes to reflect the will of the people of Nevada. Here, the mathematics are pure and incontrovertible. The *report*, at minimum, of the vote as tabulated is incorrect. Contestant does not allege who caused this to happen, when it happened, or how it happened---only that is HAS HAPPENED. That is

1 mathematically irrefutable. There is no need to either allege or prove fraud--illicit
2 mathematics were applied to the vote count. As a result, the election results were
3 overwhelmingly skewed against Contestant Joey Gilbert as demonstrated by the
4 geometry set forth herein in support of his contentions.

5
6 74. However---and without resorting to allegations of fraud---a manual hand count and/or a
7 correct statistical application of the vote as announced to restore a recovered vote
8 tabulation will prove that Mr. Gilbert actually won the Primary Election by more than
9 55,000 votes. He must be certified as the proper Republican Primary winner to run for
10 Governor of Nevada in the 2022 General Election.

11 75. The announced vote count in Clark County, at minimum, is permeated with anomalies so
12 egregious as to render *the results as presented incapable of certification*.

13
14 76. Setting aside an election in which the people have selected their candidate is a drastic
15 remedy that should not be undertaken lightly, but should be reserved for cases in which a
16 person challenging the election has clearly established a violation of election procedures
17 and pure mathematics and has demonstrated by clear and convincing evidence that the
18 errors have placed the result of the Primary Election in doubt.

19 77. Nevada law allows elections to be contested through litigation, both as a check on the
20 integrity of the election process and as a means of ensuring the fundamental right of
21 citizens to vote and to *have their votes counted accurately*.

22
23 78. Mr. Gilbert, Contestant herein, fully understands and appreciates the manifold bases for
24 the judiciary to remove itself from electoral politics. But in this instance, this Honorable
25 Court does have the final authority to address this miscarriage of justice regarding the
26 illicit and wrongful application of illegal mathematical formulae and geometric
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1 equations, and to *cause the recovery of the correct vote count*, and must do so, to restore
2 the confidence Nevadans in their electoral process.

3 **Relief Requested**

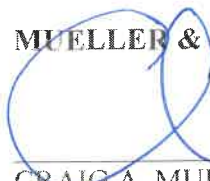
- 4 • In consideration of the foregoing, Contestant Joey Gilbert hereby prays for the following
5 relief pursuant to NRS §293.417:
- 6 • That the result of the Republican Primary Election on June 14, 2022 be annulled or set
7 aside; and,
- 8 • That certification of the Primary Election results be denied until the tabulation of the
9 announced vote can be mathematically determined; and,
- 10 • That the illegal-geometry utilized in the count and recount of the vote be mathematically
11 corrected and the vote mathematically restored to its corrected; or,
- 12 • That the Court set this matter for hearing not less than 5 days nor more than 10 days after
13 the filing of the instant Statement of Contest (NRS §293.413); and,
- 14 • The Court refer this Contest to a special master with all powers necessary for a proper
15 determination of the Contest. (NRS §293.413); and
- 16 • That Contestant be permitted to conduct discovery in the Contest. *See* NRS §293.415,
17 and,
- 18 • The Court order a state-wide investigation of the existing voting program pursuant to
19 NRS §293B.135(3); and,
- 20 • An inspection of all reports and all test material kept sealed by the clerk pursuant to NRS
21 §293B.155; and,
- 22 • An inspection of the logic and accuracy test ballots and the official ballots retained
23 pursuant to NRS §293B.170.; and,
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- That a record, printed on paper, of each ballot voted in the 2022 Primary Election be preserved and inspection by Contestant be provided pursuant to NRS §293B.400; and,
- An examination of the record maintained according to NRS §293.3625, and
- That Joseph Lombardo's ostensible "election" as the Republican candidate for Governor be set aside pending a corrected geometric application and restorative statistical analysis applied to the announced vote.

DATED this 15th day of July, 2022.

MUELLER & ASSOCIATES, INC.



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VERIFICATION

I, JOEY GILBERT, declare that I am the Plaintiff in the above-entitled action; that I have read the foregoing **STATEMENT OF CONTEST OF THE JUNE 14, 2020 PRIMARY ELECTION PURSUANT TO N.R.S. 293.407** and know the contents thereof; that the pleading is true of my own knowledge, except for those matters therein contained stated upon information and belief, and that as to those matters, I believe them to be true.

I declare under penalty of perjury under the law of the State of Nevada that the foregoing is true and correct.

DATED this 14th day of July 2022.



JOEY GILBERT, Plaintiff

EXHIBIT A

EXHIBIT A

Clark County, 2022, Primary Precinct Analysis

Abstract

This paper will demonstrate how to measure the difference between a fair and an unfair election, where an unfair election is an election where the result is predetermined algorithmically.

At the very core of this article lay the assumption of Causality, that the Effect cannot precede the Cause; likewise, the Aggregate Percentage of a Candidate cannot precede the Election Day and the Mail-in Percentages of that candidate. In a fair election, the aggregate cannot be known until after all ballots are cast; in an election that is unfair, where the aggregate was predetermined, the aggregate becomes the cause and the Mail-in Vote (and/or the Election Day Vote) becomes the effect...and the laws of mathematics allow us to readily discern between which was the cause...and which was the effect.

To Paraphrase Immanuel Kant: *"The causation is the thing without which, is a condition of possibility of a thing, and so it is satisfied in the thing"*

The aggregate is not a condition of possibility for the Mail-in vote. The Aggregate is a Concept that relates two things. People vote by mail and people vote at the polls on election day, but no one, to my knowledge, has voted by aggregate.

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Preface

Suppose at Lorraine High School, a precinct among many in a particular election, there were two candidates and two 41 methods of voting. The first method of voting would be at the polls on election day; the second mode would be remotely by mail. An unscrupulous actor has already decided that the first candidate will receive exactly 50% of Lorraine High School's vote, regardless of the first candidate's share of the vote on election day. Using a simple equivalence relationship, the malicious actor can adjust the Mail-in percentage in order to achieve a predetermined aggregate result of 50% for the first candidate.

Let us suppose that 1000 persons voted on election day at Lorraine High School, and the first candidate received 750 votes on election day, then the first candidate had 75% of the election day vote at Lorraine.

An additional 1000 persons voted by mail in the Lorraine region; thus a total of 2000 persons voted at Lorraine overall. Since the malicious actor has pre-determined the aggregate percentage to be 50%, then the first candidate will end this election with 1000 votes out of the 2000 total; thus, since the first candidate already has 750 votes, the first candidate will receive an additional 250 votes in the mail, which is 25% of the mail-in vote; such that the combined aggregate, 75% of the election day vote and 25% of the Mail-in Vote results in a 50% Aggregate for the first candidate.

Now let us suppose instead that 2000 persons voted by mail, then the total number of votes at Lorraine would be 3000, and to achieve a 50% aggregate, the first candidate must receive 1500 of those 3000 votes. The first candidate already has 750 votes, and thus they require an additional 750 votes from the mail to sum to 1500. Since 750 divided by 2000 is equal to 37.5%, the first candidate now receives 37.5% of the Mail-in Vote, such that 75% of the Election Day Vote and 37.5% of the Mail-in Vote combines to an aggregate of 50% of the aggregate vote.

We now define a simple parameter, ζ , where $\zeta = \frac{\text{Total number of Mail in Votes}}{\text{Total Number of Election Day Votes}}$, which is the proportion of Mail-in Votes to Election Day Votes; we state the following law that governs the relationship between the Election Day Vote, the Mail-in Vote and the combined Aggregate vote, whether or not the election is fair or unfair:

Let M = Mail - in Percentage of the first candidate
 Let E = Election Day Vote Percentage of the first candidate
 Let A = Aggregate Percentage of the first candidate

$$M = A - \frac{E-A}{\zeta}$$

This Hyperbolic relationship between the modes of voting in respect to a particular candidate forms the foundation of this entire article, for it is this relationship that allows us to measure with absolute certainty whether or not an election was or was not engineered to achieve a predetermined outcome.

From an argument on social media I had with a confused citizen (paraphrased for more clarity):

Me: "If you were told that Kathy had 25% of the election day vote and 75% of the mail-in vote in a precinct, can you tell me Kathy's Aggregate Percentage?"

Confused Citizen : After much thought... "No."

Me: "You need the proportion of mail-in to election day votes. If the proportion is 1 to 1, then Kathy gets a 50% aggregate. If the proportion is 3:1 then Biden gets a $(25\%+3*75\%)/4$ Aggregate which is 62.5% of the precinct's vote."

Confused Citizen: "Right, so you're saying that there's an illegal formula that can give us the aggregate for all precincts, without the proportion of Mail-in to Election Day Votes?"

Me: "Yes. The fact that Kathy's Mail-in Percentage is a continuous function of her aggregate and election day percentage across all the precincts proves that the election has been altered from its original state... thus they had to backsolve the proportion of mail-in to election day votes."

 Manifolds In Action; County Recorder Data

<https://docs.google.com/spreadsheets/d/1Rk0QNzNuboit7pyY1UbGIIQyl5JtLxqcnoMmQpK3Xkw/edit?usp=sharing>

Preface Equation 0.1.1: The Bivariate Real Number Cubic Manifold, Candidate B vs Candidates A and C; Sheriff

Let Candidate A be Hyt; let Candidate B be McMahill; let Candidate C be Roberts.

Let A_1, A_2, A_3 be Hyt's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let B_1, B_2, B_3 be McMahill's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let C_1, C_2, C_3 be Robert's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let $s_1 = B_1$

Let $t_1 = C_1$

Let $u_1 = B_3$

Let $v_1 = A_1 + A_3 + C_2$. The sum v_1 , and its summands, A_1, A_3, C_2 are true and authentic to the original data.

$$g_1 = \frac{s_1}{s_1+v_1}, h_1 = \frac{u_1}{u_1+t_1}, \alpha_1 = \frac{s_1+u_1}{(s_1+u_1)+(t_1+v_1)}, \Omega_1 = \frac{s_1+t_1}{(s_1+t_1)+(u_1+v_1)}, \lambda_1 = \frac{s_1+v_1}{(s_1+v_1)+(u_1+v_1)}$$

$$\Gamma_1 = \frac{u_1+t_1}{s_1+v_1} = \frac{1-\lambda_1}{\lambda_1}, \quad w_1 = (1 - h_1) = \frac{t_1}{u_1+t_1}$$

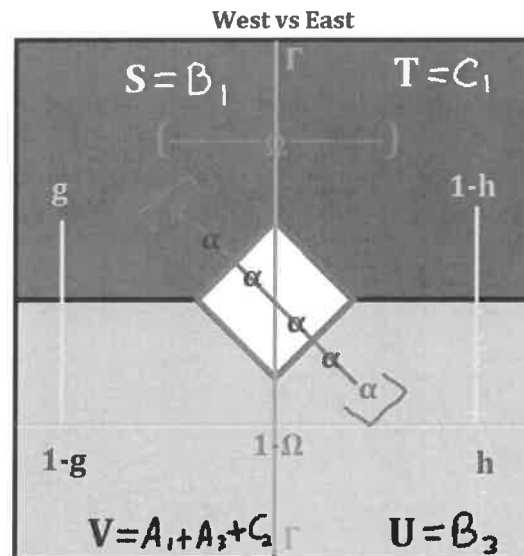
In a fair election:

$$g = \alpha + \Gamma(\alpha - h) = \frac{\alpha-(1-\lambda)h}{\lambda} = \Omega + \Gamma(\Omega - w) = \frac{\Omega-(1-\lambda)w}{\lambda} = \frac{(\Gamma+1)(\Omega+\alpha)-\Gamma}{2}$$

In the above sequence of equalities, three of the five proportions must always be known to resolve g_1 , however, in Clark County we obtain the illegal cubic manifold equations that yields g_1 with only α_1 and Ω_1 (see next page).

What this means is that the total percentage of Early and Election Day ballots cast for McMahill, amongst the set of Hyt's Early and Election Day ballots, McMahill's Early and Election Day Ballots, and Robert's Early and Mail-in Ballots, was predetermined before the election. This percentage is the Red Diagonal Aggregate, $\alpha = \frac{s+u}{(s+u)+(t+v)}$, in the below image.

It also tells us that the total percentage of Early Ballots cast for McMahill and Robert's, was also predetermined before the election, amongst the same ballot set. This percentage is the North Horizontal Aggregate $\Omega = \frac{s+t}{(s+t)+(u+v)}$.



The bivariate cubic equation will have g isolated on the right-hand side. In the diagram on the previous page, g is the West Side Percentage, that is the percentage share of ballots that belong to s amongst s and v , $g = \frac{s}{s+v}$, in other words, this is the share of Early ballots that McMahill shall receive against the number of Early and Election Day ballots for Nyt and Mail-in Ballots for Roberts.

Once g is illegally resolved from the cubic surface of α, Ω , both h and λ are compelled into existence, since in any election, fair or unfair:

$$g = \frac{(\Gamma+1)(\Omega+\alpha)-\Gamma}{2} \Rightarrow \Gamma = \frac{2g-\Omega-\alpha}{(\Omega+\alpha-1)}; h = \alpha + \Gamma^{-1}(\alpha - g); w = 1 - h = \frac{t}{u+t}$$

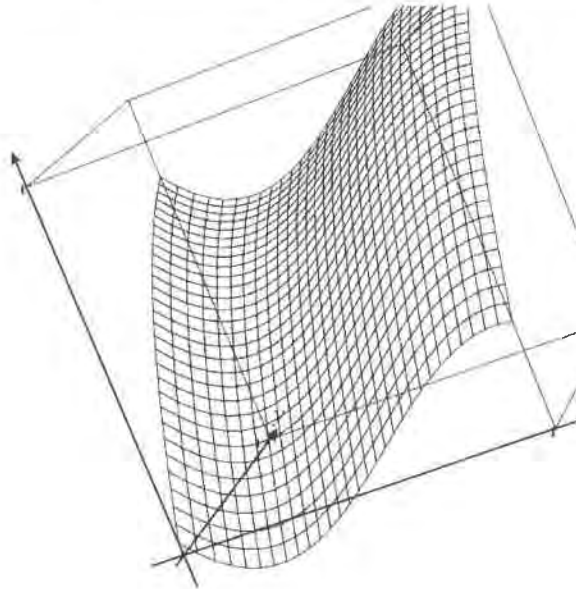
Since the proportions, g_1, α_1, Ω_1 are known, it forces the value of Γ_1 , which is proportion of East Side Ballots to West Side Ballots, that is $\Gamma_1 = \frac{u_1+t_1}{s_1+v_1}$, is now forced. Since s_1 and v_1 are both known at this stage, then so the sum of u_1 and v_1 .

Since Γ_1, α_1, g_1 are known, it forces the value of h_1 , which is the percentage of u_1 ballots amongst u_1 and t_1 . Since the sum of u_1 and t_1 is already known, and h_1 tells us proportion of t_1 to u_1 ballots via the identity: $\frac{t_1}{u_1} = \frac{1-h_1}{h_1}$, then we know the values of u_1 and t_1 . Thus, after the execution of this algorithm, McMahill's Early and Election Day totals and Robert's Early Total have been illegally calculated and are now known and used as inputs for the second equation that will follow on the next page.

The illegal bivariate cubic equation is as follows, with an $R^2 = 0.9945927405$ (image below is the 3D surface that the Clark County precincts rest upon when their α, Ω, g values are plotted in x, y, z space respectively. The residual values have a perfect normal distribution, and the residual errors come from, and only from, whether or not they rounded the illegally calculated vote totals up or down to the nearest integer.

$$g = k_0 + k_1\Omega + k_2\alpha + k_3\alpha\Omega + k_4\alpha^2 + k_5\alpha^3$$

k_0	k_1	k_2	k_3	k_4	k_5
0.06651190607	0.9682383708	- 1.329810827	- 0.2934501699	3.856469812	- 2.198539769



After the execution of this formula, the following values are known:

Legitimate Inputs are: A_1, A_3, C_2

Illegal Outputs are: B_1, B_3, C_1

Preface Equation 0.1.2; The Second Bivariate Real Number Cubic Manifold, Candidate B vs Candidates A and C; Sheriff

Let Candidate A be Hyt; let Candidate B be McMahill; let Candidate C be Roberts.

Let A_1, A_2, A_3 be Hyt's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let B_1, B_2, B_3 be McMahill's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let C_1, C_2, C_3 be Robert's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let $s_2 = B_2$

Let $t_2 = A_2$

Let $u_2 = (B_1 + B_3)$

Let $v_2 = (A_1 + A_3) + (C_1 + C_3)$.

$$g_2 = \frac{s_2}{s_2+v_2}, h_2 = \frac{u_2}{u_2+t_2}, \alpha_2 = \frac{s_2+u_2}{(s_2+u_2)+(t_2+v_2)}, \Omega_2 = \frac{s_2+t_2}{(s_2+t_2)+(u_2+v_2)}, \lambda_2 = \frac{s_2+v_2}{(s_2+v_2)+(u_2+v_2)}$$

$$\Gamma_2 = \frac{u_2+t_2}{s_2+v_2} = \frac{1-\lambda_2}{\lambda_2}, \quad w_2 = (1 - h_2) = \frac{t_2}{u_2+t_2}$$

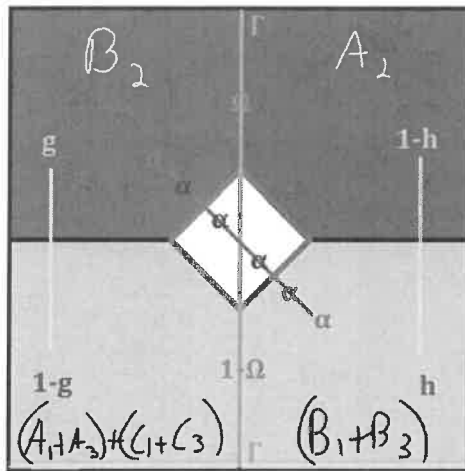
In a fair election:

$$g = \alpha + \Gamma(\alpha - h) = \frac{\alpha-(1-\lambda)h}{\lambda} = \Omega + \Gamma(\Omega - w) = \frac{\Omega-(1-\lambda)w}{\lambda} = \frac{(\Gamma+1)(\Omega+\alpha)-\Gamma}{2}$$

In the above sequence of equalities, three of the five proportions must always be known to resolve g_2 , however, in Clark County we obtain the illegal cubic manifold equations that yields g_2 with only α_2 and Ω_2 (see next page).

What this means is that the total percentage of **ALL** ballots cast for McMahill, amongst the set of **ALL** ballots cast for Hyt, McMahill's Early and Election Day Ballots, and Robert's Early and Election Day Ballots, was predetermined before the election. This percentage is the Red Diagonal Aggregate, $\alpha = \frac{s+u}{(s+u)+(t+v)}$, in the below image.

It also tells us that the total percentage of Mail-in Ballots cast for McMahill and Hyt, was also predetermined before the election, amongst the same ballot set. This percentage is the North Horizontal Aggregate $\Omega = \frac{s+t}{(s+t)+(u+v)}$.



The bivariate cubic equation will have g_2 isolated on the right-hand side. In the diagram on the previous page, g_2 is the West Side Percentage, that is the percentage share of ballots that belong to s_2 amongst s_2 and v_2 , $g_2 = \frac{s_2}{s_2+v_2}$, in other words, this is the share of Mail-in ballots that McMahill shall receive against the number of Early and Election Day ballots of both Hyt and Roberts.

Once the g_2 proportion is illegally resolved from the cubic surface of α_2 and Ω_2 , both h_2 and λ_2 are compelled into existence, since in any election, fair or unfair:

$$g = \frac{(\Gamma+1)(\Omega+\alpha)-\Gamma}{2} \Rightarrow \Gamma = \frac{2g-\Omega-\alpha}{(\Omega+\alpha-1)}; h = \alpha + \Gamma^{-1}(\alpha - g); w = 1 - h = \frac{t}{u+t}$$

Since the proportions, g_1, α_1, Ω_1 are known, it forces the value of Γ_1 , which is proportion of East Side Ballots to West Side Ballots, that is $\Gamma_2 = \frac{u_2+t_2}{s_2+v_2}$, is now forced.

Since Γ_2, α_2, g_2 are known, it forces the value of h_2 , which is the percentage of u_2 ballots amongst u_2 and t_2 and tells us proportion of t_2 to u_2 ballots via the identity: $\frac{t_2}{u_2} = \frac{1-h_2}{h_2}$. Since the value of u_2 is known, since B_1 and B_3 were illegally calculated in the previous equation, then the value of t_2 is therefore known, which is Hyt's Mail-in Vote.

Hence, now the sum of u_2 and v_2 is known, and the proportion of West Side to East Side Ballots is equal to $(\Gamma_2)^{-1} = \frac{s_2+v_2}{u_2+t_2}$, thus the of s_2 and v_2 is now known, and the value of g_2 tells us the percentage of s_2 ballots that belong to the sum $s_2 + v_2$, then we multiply that sum by g_2 to yield s_2 , and the remainder is v_2 . Since $s_2 = B_2$, we have McMahill's Mail-in Vote.

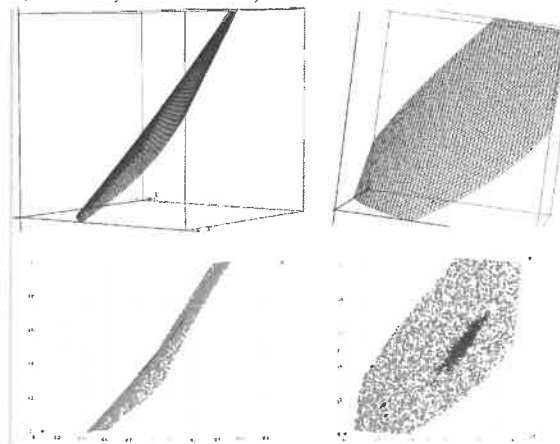
Since v_2 is known, and $v_2 = (A_1 + A_3) + (C_1 + C_3)$, and A_1, A_3 are natural and C_1 was illegally calculated in the previous equation, we finally resolve $C_3 = v_2 - (A_1 + A_3) - C_1$, which is Robert's Election Day Vote, and now all of the precinct totals, for each candidate, in each mode of voting, is known across the entirety of Clark County, Nevada.

The illegal bivariate cubic equation is as follows, with an $R^2 = 0.9945927405$ (image below is the 3D surface that the Clark County precincts rest upon when their α, Ω, g values are plotted in x, y, z space respectively. The residual values have a perfect normal distribution, and the residual errors come from, and only from, whether or not they rounded the illegally calculated vote totals up or down to the nearest integer.

$$g = k_0 + k_1\Omega + k_2\alpha + k_3\Omega^2 + k_4\alpha^2 + k_5\alpha^3$$

k_0	k_1	k_2	k_3	k_4	k_5
+0.03384844658	+1.162423939	-1.292166199	-0.418952775	+3.545617525	-2.003217744

In the image below is the ideal 3D surface (gray wireframe), from two perspectives. The images below them are the ideal surface in red, generated from random α, Ω coordinates, and the actual Clark County precincts in blue. They do not deviate from the red. The α, Ω, g bounds are all from 0 to 1 (that is from 0% to 100%, the entirety of the unit cube).



The next question is how we restore the election results back to their original state before they were altered.

In a fair election, according to both historical records of past elections prior to 2020, and tens of millions of simulations, the way in which people cast their ballot should not influence their choice of candidate; likewise, their choice of candidate should not influence the way in which they prefer to cast their ballot.

This implies, at particular precinct, each candidate's proportion of election day, to early, to mail-in ballots, should be roughly the same, as all other candidates, in all races. Again, this is confirmed by historical records of elections prior to 2020 and countless simulations.

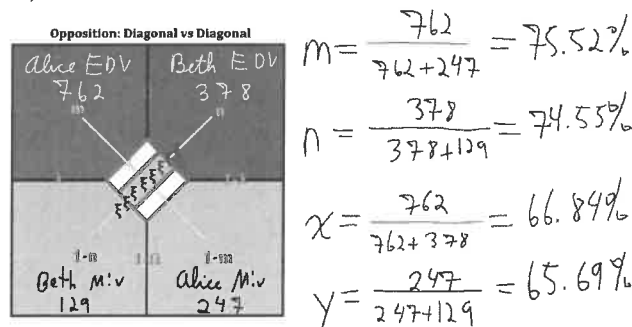
Thus if Alice receives 1000 votes, 750 on Election Day and 250 in the Mail, which is a 3:1 proportion of Election Day to Mail-in Votes, then Beth, regardless of how many votes she receives overall, should have roughly 3 election day votes for each mail-in vote, in that same precinct, and so should all candidates at that precinct, in all races.

This is because it is expected that the electorate of this precinct prefers to cast their ballots by Election Day to Mail-in at a 3:1 ratio, regardless of which candidate they choose. Therefore, if Beth receives 500 votes overall, then we expect her to have 375 Election Day Votes and 125 Mail-in Votes, give or take several votes in each category (that is, highly correlated, but not causated!).

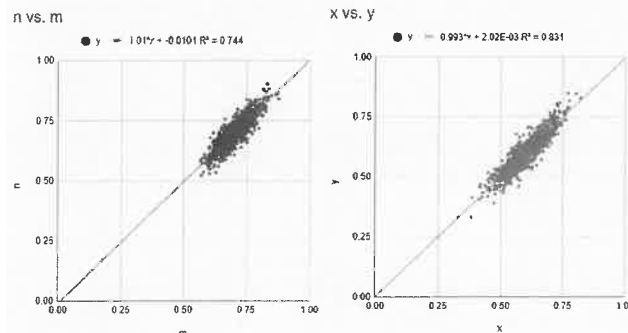
Also, if Alice receives 66% of the Election Day Vote at a particular precinct, then we also expect Alice to receive 66% of the Mail-in Vote at that precinct.

This is because that since the way in which people cast their ballots does not influence their decision, then the percentage of those that cast their ballots on Election Day for Alice, should also be roughly the same for those that cast their ballots in Mail for Alice, again, give or take a point or two (highly correlated, but not causated!).

So we may see something like (and notice that the east and west side percentages, *g* and *h*, were not mentioned, because in a fair election, even though these percentages exist, and will have pronounced quadratic correlation, the curvature of that correlation depends on the average proportion of Mail-in to Election Day ballots across the county and the difference in the mean performance of any two disjoint sets of candidates).



Although the values of *m* and *n* are not the same, they are roughly the same. And if the values of *m* and *n* are plotted across the precincts for the entire county, they should fall inside of an ellipse, whose center exists on the line $m = n$ and whose major axis also exists on the line $m = n$; likewise the same should be true for the relationship of *x* and *y*.



Please visit the following links for more information on Principal Component Analysis before you continue to the next page if you are not familiar with the topic: [Ali Ghodsi, Lec 1: Principal Component Analysis](#)

<https://www.youtube.com/watch?v=r-1Ib26a2Bf8>

<https://www.youtube.com/watch?v=L-pOrGm3YS8>

https://www.cs.princeton.edu/picasso/mats/PCA-Tutorial-Intuition_ip.pdf

With the above page in mind, we must now assess how the algorithm itself operates in the Sheriff results. We know that A_1, A_3, C_2 are legitimate inputs, that is, the proportion between $A_1: A_3: C_2$ must be true and authentic to the original data.

However, that is only the relative values of A_1, A_3, C_2 . There is undoubtedly a scale, z , which is being applied against A_1, A_3, C_2 . This means if we wrote A_1, A_3, C_2 as a vector, the orientation of this vector would remain the same in 3D space, but the magnitude itself may and shall vary from the original vector.

Although the algorithm itself is not beyond human understanding, it would be too difficult for any human to interact directly with the algorithm at a precinct level before and during the election.

Thus, we can surmise that the only human interaction with this algorithm is:

1. Selecting the First, Second and Third place candidates across Clark County for Sheriff.
2. That the turnout cannot exceed some constant percentage of the registered voters at any particular precinct.
3. That the total number of ballots generated must be the same as the original number of ballots cast.

The first point determines who wins and who loses... the true goal of the algorithm; the second point ensures that turnout remains below 100% of the registered voters (in a general election), or below some other percentage in a primary (low turnout); the third point ensures that the number of true ballots that are destroyed, or new ballots created, is minimized. Proper execution of the third point should also cover the second point.

The Neural Network is provided the original values of $A_{1,0}, A_{2,0}, A_{3,0}, B_{1,0}, B_{2,0}, B_{3,0}, C_{1,0}, C_{2,0}, C_{3,0}$, in each precinct, and thus knows the total sum of these ballots, Ψ_0 , in each precinct. The Neural Network then accesses its database of several billions self-learning trials on how to alter an election with three candidates and three modes, with the true first place winner, Hyt, being repurposed to last place, as the human engineer commanded.

For reasons unknown to us mere humans, the Neural Network chose an algorithm that preserves the relative values of $A_{1,0}, A_{3,0}, C_{2,0}$ and uses their sum as the baseline integer value of v_1 to yield s_1, u_1, t_1 , which are the new values of $B_{1,1}, B_{3,1}, C_{1,1}$, (which remain in decimal form) from a cubic manifold equation that allows it to manufacture and adjust the arbitrary aggregate inputs α_1, Ω_1 on a whim, in any precinct, at any time.

It then recycles the general methodology of the first cubic, using $u_2 = B_{1,1} + B_{3,1}$ as the baseline integer input to yield s_2, t_2, v_2 , from which come the new values of $B_{2,1}, A_{2,1}, C_{3,1}$, which also remains in decimal form. From this second cubic the algorithm now has two additional aggregate inputs, α_2, Ω_2 , which it can alter, in any precinct, at any time.

The total sum of the new ballots $\Psi_1 = A_{1,0}, A_{3,0}, C_{2,0} + (B_{1,1}, B_{3,1}, C_{1,1}) + (B_{2,1}, A_{2,1}, C_{3,1})$ is then determined, from which the scale $z = \frac{\Psi_0}{\Psi_1}$ is now applied across $(A_{1,0}, A_{3,0}, C_{2,0}), (B_{1,1}, B_{3,1}, C_{1,1}), (B_{2,1}, A_{2,1}, C_{3,1})$, and rounded up or down to the nearest integer, using the standard rules of rounding (as in Excel), since numerous tests have confirmed that no rounding preference (a floor, or ceiling) had ever been applied to any vote total in this election.

The scaling action preserves the relative values of $(A_{1,0}, A_{3,0}, C_{2,0})$ amongst themselves, and ensures that the total sum of scaled and rounded ballots does not exceed ± 9 from the original total (± 1 per each vote total, of which there are nine), and, since no preference is given, the average difference between the true sum of the ballots, and the resulting sum of the ballots, is zero, minimizing the number of existing ballots to be destroyed (and new ballots to be created).

The number of Election Day, Early, and Mail-in Ballots, that must be discarded and injected (exchanged), in order to enforce the new proportion of Election Day, to Early to Mail-in Ballots, it then optimized (minimized) by adjusting the values of $\alpha_1, \Omega_1, \alpha_2$ and Ω_2 in each precinct based on each precinct's needs to minimize such an exchange of ballot modes, without upsetting the countywide order in which the candidates are to win (that is, so long as the intended winner, McMahl, receives the most votes in the County, with a sufficient county-wide percentage margin to prohibit an automatic recount, and that Roberts receives more votes than Hyt, then the Neural Network has achieved its task of altering the election, without blowing the number of registered voters, or hardset turnout conditions, and minimizing the number of ballots that are created and destroyed and whose modes are exchanged, across the precincts, and therefore across the entire County).

▣ Gradient descent, how neural networks learn | Chapter 2, Deep learning

<https://www.youtube.com/watch?v=H1ZwWfFWa-w>

https://en.wikipedia.org/wiki/AlphaZ_cro

<https://www.dccpmind.com/blog/alphastar-mastering-the-real-time-strategy-game-starcraft-ii>

<https://corporatefinanceinstitute.com/resources/knowledge/economics/nash-equilibrium-game-theory/>

<http://neuralnetworksanddeeplearning.com/chap1.html>

How Elections are Restored; Examples from 2020; Hartung vs Baker and Stavros vs Miller

The following Four Pages are an excerpt from a prior article on this subject concerning the 2020 election results of Hartung vs Baker and Stavros vs Miller and the 2004 results of Bush vs Kerry.

I will provide the reader with a brief explanation of how Election Results are restored, and examples of fair elections in Clark and Washoe Counties in 2008,2012,2016 and the altered election of 2004 (in Bush's favor). We will start with an easy race to restore (most of them follow this procedure) where the Republican Hartung (the intended winner of the algorithm) was given an unfair advantage to secure their election against Democrat challenger Baker for the County Commissioner 4 seat.

Hartung was put in a stellar position by the algorithm. The first graph (top left) reads that even if Mr. Hartung received 0% of the Mail-in Vote, he would magically receive 25% of the combined Election Day and Early Vote.

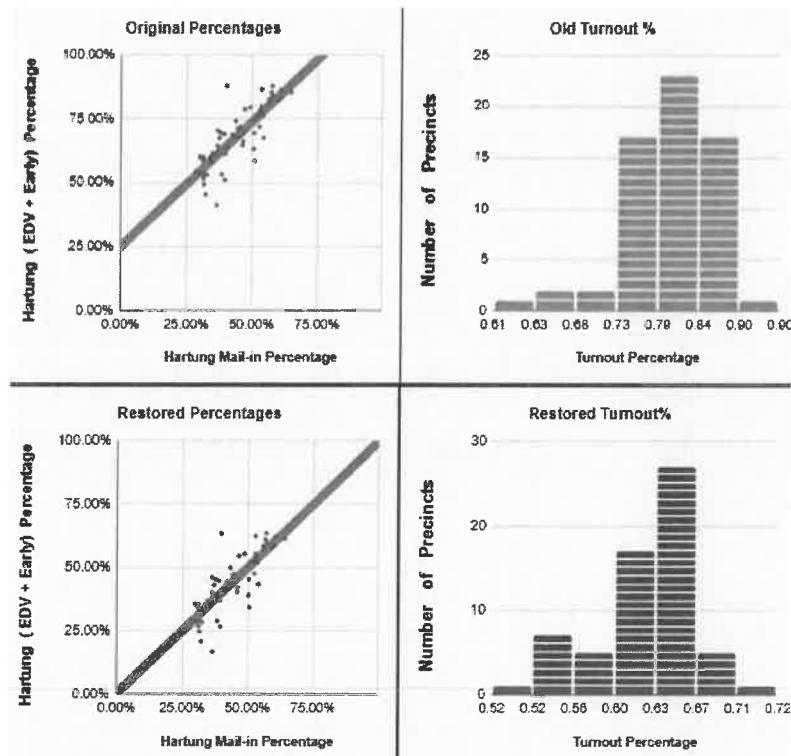
At the same time, in order to keep Ms. Baker ahead of Hartung in the Mail (to maintain the facade that Democrats overperformed in the Mail), they made it that if Mr. Hartung got 100% of the Early (+EDV) vote, Ms. Baker would magically receive 25% of the Mail-in Vote (since he gets 75% in the Mail, which is the x-axis).

Although this observation is not proof of election fraud, after fraud is proven (via the formula used to rig the election) it is through this observation that we can then proceed to restore the election to its rightful state.

In a fair election, we expect a candidate that received 10% of the Election Day Vote to get roughly 10% of the Mail-in Vote; likewise if they get 90% of the Election Day Vote, we expect them to get 90% of the Mail-in Vote. Even if Democrats prefer to vote by mail, that should reflect in both percentages across the precincts, not just one of them. In other words, if we plot the election day and mail-in percentages against each other across the precincts, they should array themselves across a 45 degree angle of $y = x$.

To restore this election (go to CountyCom4; Baker) page in the spreadsheet link on the following page) we first remove the positive intercept from the Winner of the election, plotting the dominant method of voting on the y-axis.

We then take the angle of the linear regression, find the difference from 45 degrees, and then execute a rotation matrix to bring the precinct percentages back to the line $y = x$. The manner in which the election is rigged determines how the candidate vote totals (integers) are rescaled. Since every election that was altered was done via the West vs East paradigm (you will learn more about this paradigm shortly in Chapter I), we know that Hartung's Mail-in Vote and Baker's EDV+Early Vote are true and authentic (they were used as natural inputs to alter Hartung's Early Vote and Baker's Mail-in Vote, which are the outputs).



2020 Election Restoration Algorithm , Hartung vs Baker

This is the algorithm to restore the Baker-Hartung Election and applies to most restorations, including for counties in other States, such as Maricopa, Philadelphia (PA), Atlanta (GA), Dallas and Tarrant (TX), Macomb and Oakland (MI).

<https://docs.google.com/spreadsheets/d/1yqzGh7kMc1GkIbNiu-jmKl1f1TON-Q569ec6LwZVaRc/edit?usp=sharing>

Restored Washoe Elections

Let \mathbf{P} be the set of 63 precincts that were analyzed.

Let $a_{i,0}$ be Hartung's recorded Mail-in Vote in each precinct.

Let $b_{i,0}$ be Baker's recorded Mail-in Vote in each precinct.

Let $c_{i,0}$ be Hartung's recorded Election Day + Early Vote e in each precinct.

Let $d_{i,0}$ be Baker's recorded Election Day + Early Vote in each precinct.

Let $x_{i,0}$ be Hartung's recorded Mail-in Percentage in each precinct, $x_{i,0} = \frac{a_{i,0}}{a_{i,0} + b_{i,0}}$.

Let $y_{i,0}$ be Hartung's recorded EDV+Early in each precinct, $y_{i,0} = \frac{c_{i,0}}{c_{i,0} + d_{i,0}}$.

Let m be the slope of the linear regression of x vs y ; $m = 0.9779$.

Let b be the intercept of the linear regression of x vs y ; $b = + 0.2497$

Let $\theta = \arctan(m)$; $\theta = 0.7742322822$ radians

Let $\phi = \frac{\pi}{4} - \theta$; $\phi = 0.01116588115$ radians

Let $n_1 = \cos\phi$; $n_1 = 0.9999376622$

Let $n_2 = \sin\phi$; $n_2 = 0.01116564913$

Let $\tau_i = y_{i,0} - b$ for all precincts.

Let $x_{i,1}$ be Hartung's Restored Mail-in Percentage in each precinct, $x_{i,1} = n_1 x_{i,0} - n_2 \tau_i$.

Let $y_{i,1}$ be Hartung's Restored EDV+Early Percentage in each precinct; $y_{i,1} = n_2 x_{i,0} + n_1 \tau_i$.

Let $a_{i,1}$ be Hartung's intercessory Mail-in Vote in each precinct, $a_{i,1} = \text{ROUND}[(x_{i,1})(a_{i,0} + b_{i,0})]$

Let $b_{i,1}$ be Baker's intercessory Mail-in Vote in each precinct, $b_{i,1} = (a_{i,0} + b_{i,0}) - a_{i,1}$

Let $c_{i,1}$ be Hartung's intercessory EDV+Early in each precinct, $c_{i,1} = \text{ROUND}[(y_{i,1})(c_{i,0} + d_{i,0})]$

Let $d_{i,1}$ be Baker's intercessory EDV+Early in each precinct, $d_{i,1} = (c_{i,0} + d_{i,0}) - c_{i,1}$.

Let $u_{i,1}$ be the Hartung's West Side Scale, $u_{i,1} = \frac{a_{i,0}}{a_{i,1}}$, since $a_{i,0}$ is authentic.

Let $v_{i,1}$ be the Bakers East Side Scale, $v_{i,1} = \frac{d_{i,0}}{d_{i,1}}$, since $d_{i,0}$ is authentic.

Let $b_{i,2}$ be Baker's restored Mail-in vote each precinct, $b_{i,2} = (u_{i,1})(b_{i,1})$.

Let $c_{i,2}$ be Hartung's restored EDV+Early Vote in each precinct, $c_{i,2} = (v_{i,1})(c_{i,1})$.

We now recalculate Hartung vs Baker using the integers $a_{i,2}$, $b_{i,0}$, $c_{i,0}$, $d_{i,2}$.

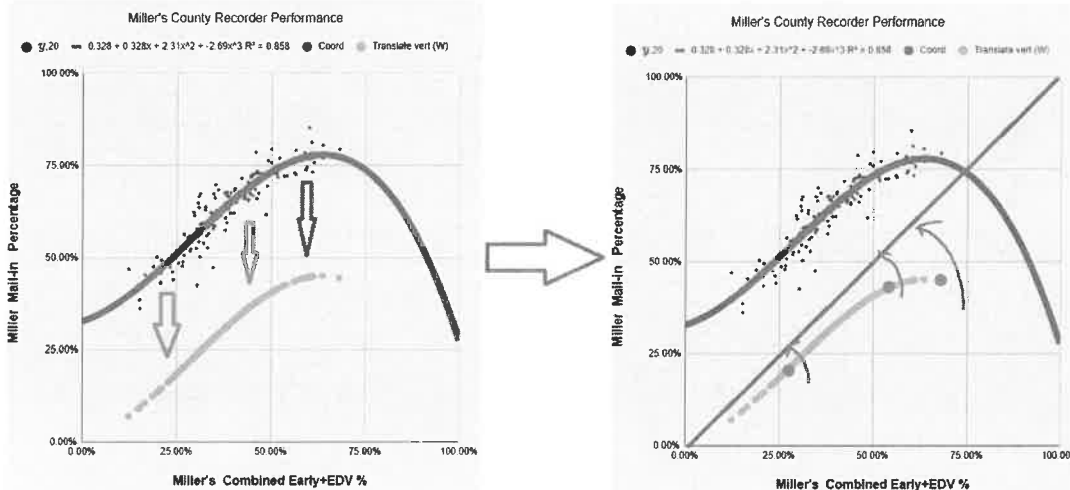
2020 Election Restoration Algorithm, Miller vs Stavros

As for Miller vs Stavros, restoring Nevada's Election is not a simple procedure of translation and rotation, this is because the Z complex formula introduced an intense quartic curvature to the Early+EDV Percentage vs the Mail-in Percentage. When an election is altered via the East vs West paradigm, it introduces strong quartic curvature to the North vs South paradigms (North vs South would be Early Vote vs Mail-in Vote in 2020, and Election Day Vote vs Early Vote in previous elections, as those were the dominant and natural forms of voting).

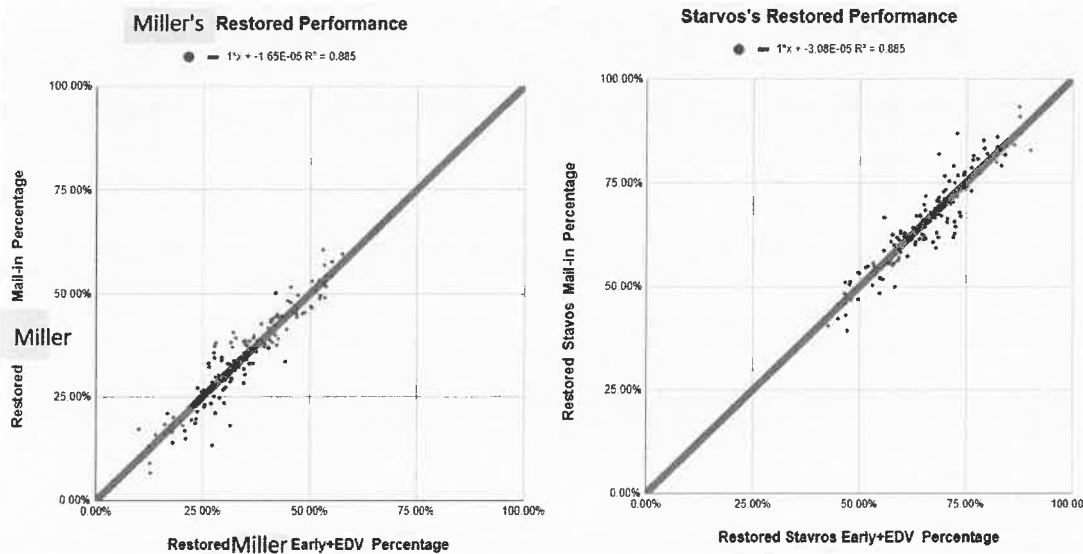
The reason quartic curvature is transferred into the North vs South Arrangement is because quartic curvature naturally occurs in the East vs West Arrangement in a fair election. In a fair election, the North and South percentages form a cloud that can be well approximated by a plane and the East and West percentages form a quartic spiral; however, when the election is altered via the West vs East paradigm, the quartic spiral appears in the traditional North vs South Percentages, and the East vs West percentages assume the plane relationship instead.

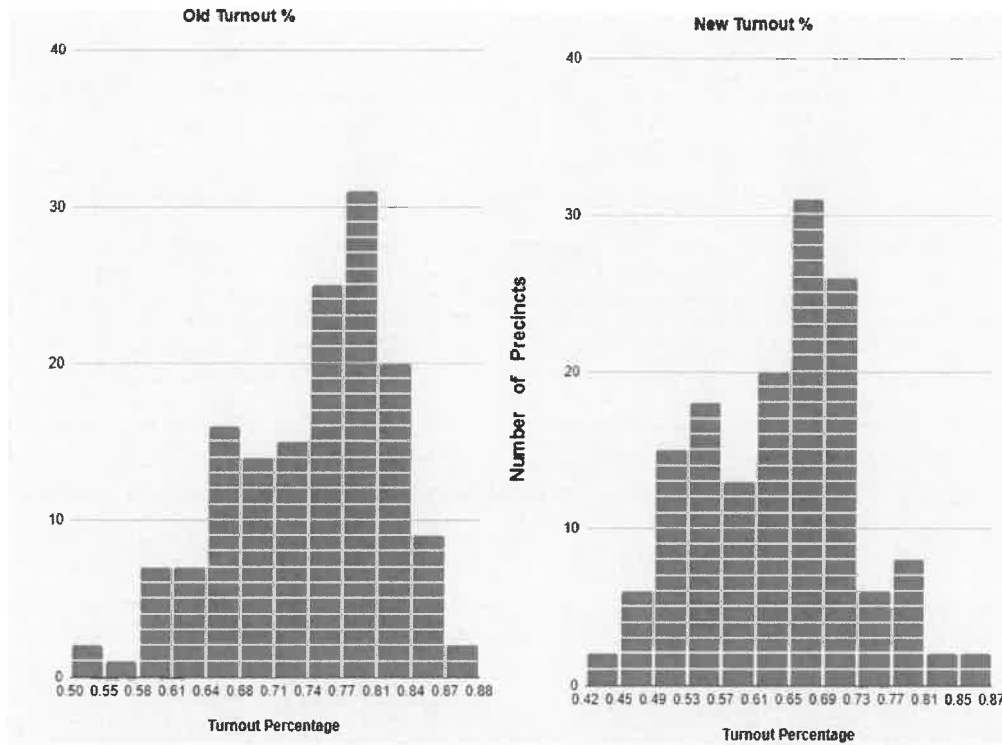
Because of this, we first subtract the y-intercept of the winner (as we did previously), and then record the difference of the Mail-in Percentage from the quartic polynomial spine.

We then do a dynamic rotation of each coordinate along the precinct interpolation of the quartic spine to bring it back to the liney = x and then add back the original residual distances. We then subtract the new values from 100% to see it from Stavros's Perspective.



We then apply the algorithm on the above page to restore and rescale the integers, knowing that Stavros's Mail-in Vote and Miller's Early Vote+EDV vote are authentic. Miller replaces Hartung as the Intended Winner and the Mail-in Vote is placed on the y-axis instead, as it was the dominant form of voting in this race. Notice that in both elections, the intended Winners, Miller and Hartung, start with a +25% intercept, which seems to be the norm in all of Nevada's altered elections, federal, state and local.





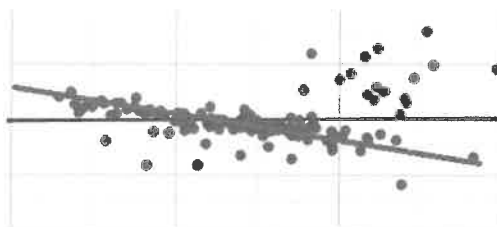
The results show that although Stavros's totals remained close to 75,000 before and after the restoration, Miller's ballot count was inflated from 44715 to 75446.

Original	County Recorder	Restored	Restored	Stavros	Vs.	Margin
Total EDV+Early	82086	Total EDV+Early	91152	Original	75313	-133
Total MiV	68673	Total MiV	37942	Restored	84379	39664
Stavros EDV+Early	50290	Stavros EDV+Early	59356			
Miller EDV+Early	31796	Miller EDV+Early	31796	Miller	Vs.	Margin
Stavros MiV	25023	Stavros MiV	25023	Original	75446	133
Miller MiV	43650	Miller MiV	12919	Restored	44715	-39664
		Cubic Restore	Miller View			
County Agg; 150 Precincts	Vs.	b0	0.32758872	County Omega	Vs.	Phantom
Original	49.95%	b1	0.328462	Original	54.44%	30731
Restored	65.36%	b2	2.31106857	Restored	70.60%	0
		b3	-2.69332122	Phantom %	20.38%	30731
County Lambda	Vs.	No b4	null	Stavros to Miller via	Adjudication	-9066
Original	62.31%	Phi Range	+5.50	Miller MiV Phantom %	70.40%	Miller Phantom Share
Restored	55.98%	In Degrees	+15.28	Stav EDV Phantom %	00.00%	100.00%
Original Turnout	74.08%			Restored Stav Early	Div by Adj	15.57%
Restored Turnout	63.43%			Restored Miler MiV	Div by Adj	70.17%

Equation 5.1.1e; The Cubic Exactitude of Miller vs Stavros, 2020, County Commissioner, Clark County

This particular local election is unique even amongst the other altered elections in Clark and Washoe Counties. I had no knowledge of the tightness of this race (15 votes) nor the prior court ruling and proceedings concerning this election. It caught my eye because it had the highest R² value of all election when the regression of $\alpha = k_1g + k_2h + k_3$ was run.

Without removing a single outlying precinct the R² of the above plane regression was 0.998, and even stranger, if the residuals of the expected value of α and the actual value of α were affine (see the image below, where the residuals have a slope). Intrigued by this observation, I decided to actually view the election result and was astounded by the shallow margin of victory for the Democrat Candidate. A google search concerning this race revealed that there were even legal proceedings about it. <https://www.8newsnow.com/news/local-news/nevada-supreme-court-upholds-millers-election-win-over-stavros-anthony/>



It turns out that someone (or something, such a neural network) took direct control of this election and warped the originally rigged flat plane via a cubic, and ignored the election day vote and registered voters entirely from the calculation, acting only the Early and Mail-in Vote.

- Let a be Stavros's Early Vote at a particular precinct.
- Let b be Miller's Early Vote at a particular precinct.
- Let c be Stavros's Mail-in Vote at a particular precinct.
- Let d be Miller's Mail-in Vote at a particular precinct.

Let $h = \frac{c}{c+b}$; let $\alpha = \frac{a+c}{(a+c)+(b+d)}$; let $g = \frac{a}{a+d}$,

$0 = k_5g^3 + g^2(k_2 + k_6h) + g(k_1 + k_3h) + (k_0 + k_4h^2 + k_7h^3 - \alpha)$, which is a general cubic in the form:

$0 = Ag^3 + Bg^2 + Cg + D$, for this race we take the first principle root of the Cubic Equation.

k0	0.03011967441	k4	0.2314017714
k1	0.8193824172	k5	1.006207413
k2	-0.9499398397	k6	-1.094817236
k3	1.064030566	k7	-0.1217901096

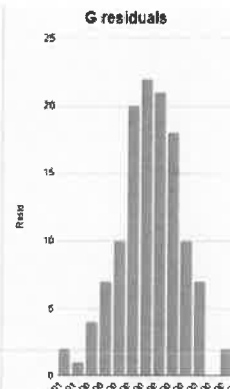
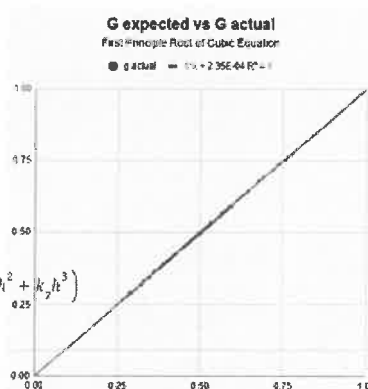
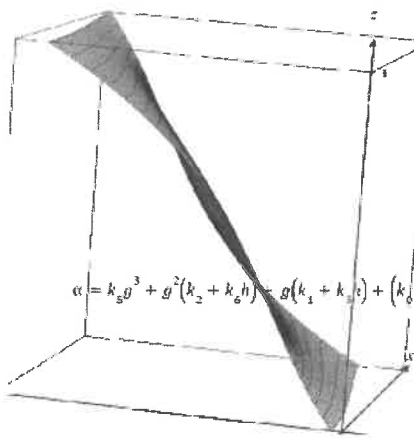
We shall use this closed form Cubic Equation Calculator using the Cardano and Vieta Method from the 16th Century:

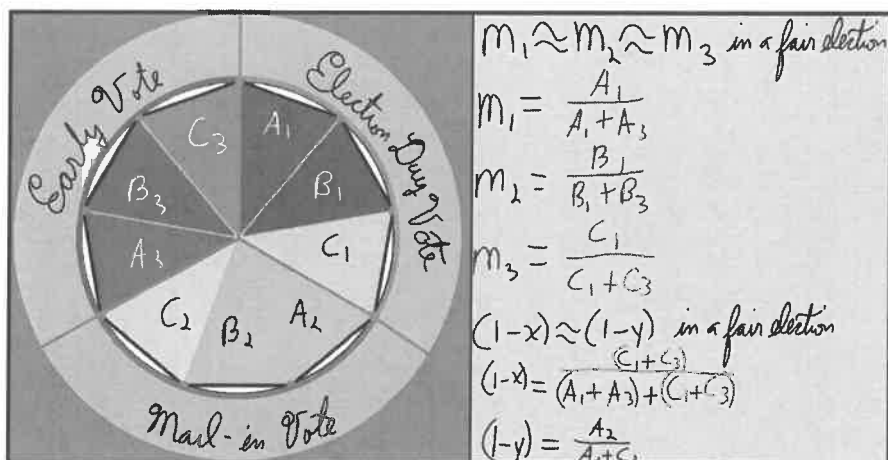
Cubic Equation Calculator, Complex Miller vs Stavros

<https://docs.google.com/spreadsheets/d/1uNxy13NAnT4oy3Ludcy3Dp7LcfvzCQ6M5UJopph2uPdo/edit?usp=sharing>

https://docs.google.com/spreadsheets/d/1ivLhOzaaOUqmpt7XTz011DoLsljXr3vNAw-79_PBCOsw/edit?usp=sharing

Type $y=0.03011967441 + 0.8193824172z - 0.9499398397z^2 + 1.064030566zx + 0.2314017714x^2 + 1.006207413z^3 - 1.094817236xz^2 - 0.1217901096x^3$ into this link <https://c3dlibretexts.org/CalcPlot3D/index.html>. Select "add to graph" and choose the "y = f(x,z)" function.





Preface Restoration Algorithm 0.1.3; Restoring the Sheriff Election

<https://docs.google.com/spreadsheets/d/1GIEUp7LY7zp221t4x19x1fnp3lukG2ZEYIUm28-5qHBB8/edit?usp=sharing>

© 2022, Sheriff Restoration, Clark County, Nevada

Since we know that the relative proportion of $A_1 : A_3$ is true and authentic to the original election results, across the precincts, then we know the expected proportion of Early to Election Day Ballots for all candidates, in all races. Thus, we know the expected proportion of B_1 to B_3 , which is McMahon's Early to Election Day ratio, in each precinct, and C_1 to C_3 , which is Robert's Early to Election Day ratio, in each precinct.

We shall call $\frac{A_{1,i}}{A_{1,i} + A_{3,i}} = m_{1,1,i}$ where i is the precinct number index.

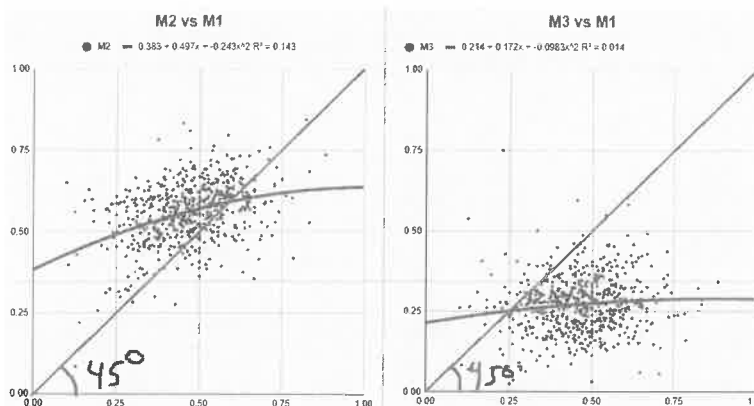
We shall call $\frac{B_{1,i}}{B_{1,i} + B_{3,i}} = m_{2,1,i}$ where i is the precinct number index.

We shall call $\frac{C_{1,i}}{C_{1,i} + C_{3,i}} = m_{3,1,i}$ where i is the precinct number index.

We now obtain the quadratic regression of $m_{2,1,i}$ and $m_{3,1,i}$ in respect to $m_{1,1,i}$

In fair a election, the regression should be strong and strictly linear in the form of $m_3 = k_0 + k_1 m_1$, with $k_0 \approx 0$ and $k_1 \approx 1$, and a small residual spread; however, the cubic manifold's manipulation of the vote totals turned this into a curved quadratic relationship, with a massive residual spread.

For Clark County $\overline{m_{2,1,i}} = 0.383 + 0.497m_{1,1,i} - 0.243(m_{1,1,i})^2$; $\overline{m_{3,1,i}} = 0.214 + 0.172m_{1,1,i} - 0.0983(m_{1,1,i})^2$



We now write the 3D parametric line that passes through the cloud of precincts when m_1 , m_2 and m_3 are plotted in 3D space, and record the residual values of m_2 and m_3 .

$$u_{0,i} = t; v_{0,i} = 0.383 + 0.497t - 0.243t^2; w_{0,i} = 0.214 + 0.172t - 0.0983t^2$$

We first subtract the intercepts from all $v_{0,i}$ and $w_{0,i}$ with the following vector difference:

$$\forall i: (u_{0,i}, v_{1,i}, w_{1,i}) = (u_{0,i}, v_{0,i}, w_{0,i}) - (0, 0.383, 0.214)$$

We now rotate each $u_{0,i}, v_{1,i}, w_{1,i}$ coordinate on this 3D quadratic line to the straight line diagonal of $u = v = w$, while preserving the magnitude of the rotated coordinate.

To do this we set $\theta_{1,i} = \text{Arctan} \frac{v_{1,i}}{u_{0,i}}$ and then set $\theta_{2,i} = \frac{\pi}{4} - \theta_{1,i}$, and execute a rotation matrix on

$u_{0,i}, v_{1,i}, w_{1,i}$ that first rotates $u_{0,i}, v_{1,i}$ by $\theta_{2,i}$, which produces the coordinate $u_{1,i}, v_{2,i}, w_{1,i}$, such that $u = v$.

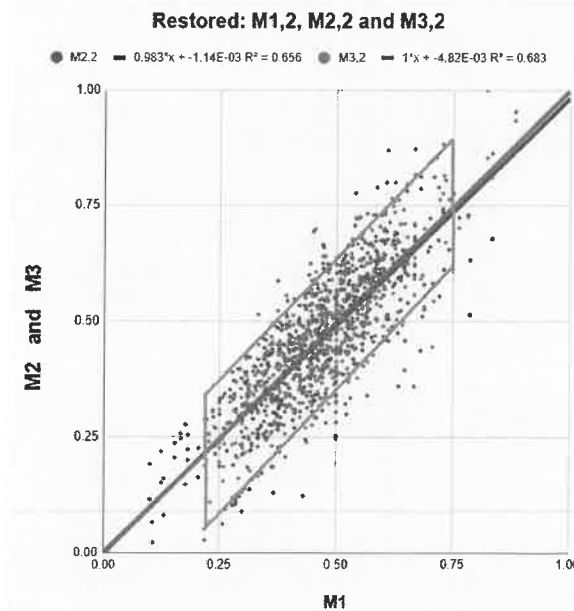
Now set $\phi_{1,i} = \text{Arctan} \frac{w_{1,i}}{u_{1,i}}$ and $\phi_{2,i} = \frac{\pi}{4} - \phi_{1,i}$ and then rotate $u_{1,i}, w_{1,i}$ by $\phi_{2,i}$ to yield $u_{2,i}, w_{2,i}$,

and then set $v_{2,i} = u_{2,i}$ such that $u = v = w$; producing the coordinate $u_{2,i}, v_{2,i}, w_{2,i}$.

We now find the residual values of $m_{2,1,i}$ and $m_{3,1,i}$ from their expected values in the earlier quadratic regressions. Let these be $r_{2,1,i}$ and $r_{3,1,i}$ respectively. We now find the standard deviation of these residuals, let this be σ_2 and σ_3 .

We now multiply all $r_{2,1,i}$ by $\frac{5\%}{\sigma_2}$, and all $r_{3,1,i}$ by $\frac{5\%}{\sigma_3}$ if either σ_2 and/or σ_3 are greater than 5%. This restores the residual spread to the rarely achieved maximum spread of 5% (standard deviation) found in historical data. Remember, that within two sigma, this is a plus or minus 10% residual spread, a range of 20% overall (hence a 5% standard deviation is actually larger than you think!). Let the rescaled residuals be $r_{2,2,i}$ and $r_{3,2,i}$ respectively.

We now add the vectors $u_{2,i}, v_{2,i}, w_{2,i}$ and $0, r_{2,2,i}, r_{3,2,i}$ to produce the Intercessor Precinct Cloud, this vector shall be the coordinates $u_{3,i}, v_{3,i}, w_{3,i}$. Finally, we locally rescale each vector $u_{3,i}, v_{3,i}, w_{3,i}$ by $\frac{m_{1,1,i}}{u_{3,i}}$, and reset any values in any component below 0% or above 100% to 0% and 100% respectively. Notice that the locally rescaled values fall inside a parallelogram as expected in a fair election.

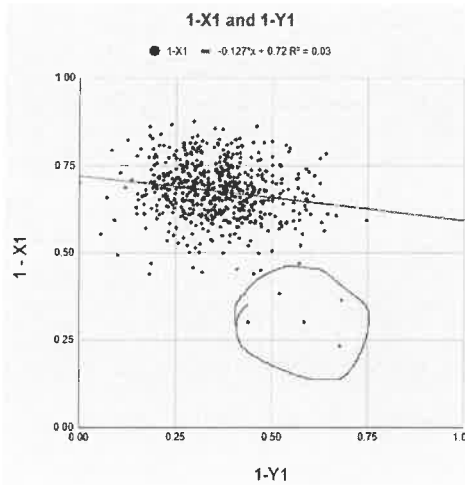


Thankfully, the next two steps are both done in two dimensions.

We now define $(1 - x_{1,i}) = \frac{(C_{1,i} + C_{3,i})}{(A_{1,i} + A_{3,i}) + (C_{1,i} + C_{3,i})}$, this percentage of Early and Election Day ballots cast for both Hyt and Roberts that belong to Roberts.

We also define $(1 - y_{1,i}) = \frac{C_{2,i}}{A_{2,i} + C_{2,i}}$, this percentage of Mail-in ballots cast for both Hyt and Roberts that belong to Roberts.

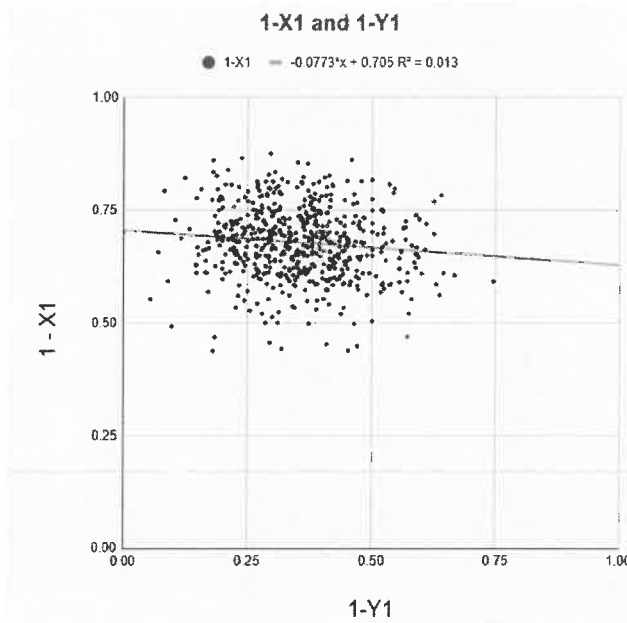
We now plot $(1 - y_{1,i})$ horizontally and $(1 - x_{1,i})$ vertically. Using our own eyeballs, we can tell that the five precincts in the maroon circled region, having the property $(1 - x_{1,i}) < 40\%$ are severe outliers and shall be excluded from the linear regression (as they are currently having a deep and undesirable impact on that linear regression).



When these precincts are removed, the steps on the previous page must also be recalculated. Since you should be doing this in Excel, the update to those previous calculations should be automatic upon their removal, starting with the quadratic regressions:

Update: For Clark County $\overline{m_{2,1,i}} = 0.442 + 0.264m_{1,1,i} - 0.0229(m_{1,1,i})^2$; $\overline{m_{3,1,i}} = 0.219 + 0.143m_{1,1,i} - 0.0646(m_{1,1,i})^2$.

With these precincts removed, we obtain the linear regression $\overline{1 - x_{1,i}} = 0.705 - 0.0773(1 - y_{1,i})$. We now subtract 0.701 from all $(1 - x)$ values, and define $\varpi = \text{ARCTAN}(-0.07737) = -3.017 \text{ degrees} = -0.077146 \text{ radians}$



Normally, we would subtract the intercept of 0.701 from all of the precincts, and then rotate the precinct data by 48.017 degrees back to the line of $(1 - x_1) = (1 - y_1) \Rightarrow (x = y)$. However, this particular Sheriff's election is so botched and so warped, that there is no correlation between the election day, mail-in and early vote percentages, between any two candidates, or any combination of two candidates against the remaining third candidate.

This is not our fault. We did not alter this election, we did not administer an illicit pair of cubic manifolds to hijack the proportions between the ballots cast across Clark County.

Since there are no longer any naturally existing correlations between the candidate's election day, mail-in, and early vote percentages across the precincts, we cannot restore this election using the conventional method of translation and rotation on percentages of ballots cast. Quite simply, there is no axis, linear or polynomial, that can pass through a circular scatter plot, with any substantial degree of correlation.

This leaves us with only one choice, the **Nuclear Option**: Turnout-Aggregate Restoration.

In a fair election, a candidate's performance is strictly linear with the percentage of registered voters that turnout. If a candidate, Kathy, receives a mean of 40% of the casted ballots across the precincts, then, regardless of the standard deviation of the candidate's performance, the regression of the percentage of registered voters who voted for Kathy, against the percentage of voters that turned out for all candidates, shall be in the form of: $\Psi_k = 0.4\Psi_T$, where $\Psi_k = \frac{\text{Kathy's Vote}}{\text{Registered}}$, $\Psi_T = \frac{\text{Total Ballots Cast}}{\text{Registered}}$.

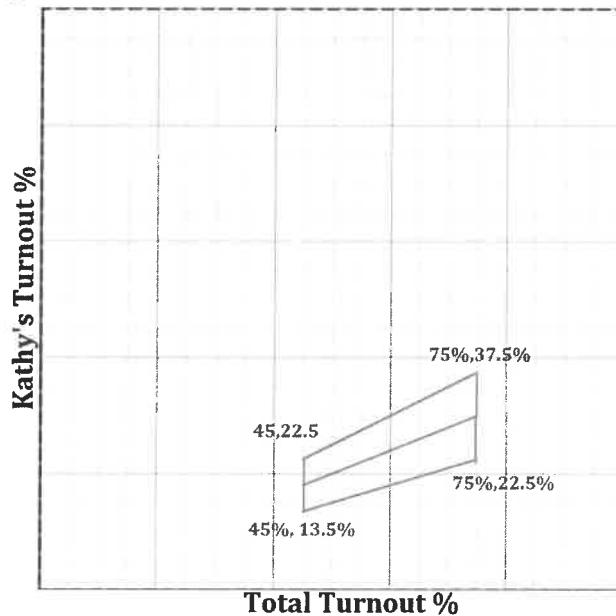
In the below diagram, Kathy receives 40% of all ballots cast, with a standard deviation of 5%, and the overall turnout across the precincts has a mean of 60%, with a standard deviation of 7.5%.

As a result, the precincts shall exist within a strict trapezoidal boundary. The horizontal boundaries are from 45% to 75%, which is two standard deviations from 60%. With Kathy receiving 40% of ballots cast, with a standard deviation of 5%, then Kathy shall always receive between 30% and 50% of all ballots cast.

We now multiply both horizontal boundaries by 30% and 50%, producing the four vertices of the trapezoid that bounds the precinct data, that is, the precinct data exists in the region $0.3x \leq y \leq 0.5x$; $0.45 \leq x \leq 0.75$, which is the equation of an obtuse trapezoid, with the line $y = 0.4x$ being both the only and the natural regression of this data.

In this scenario, the R^2 value of this regression does not measure the accuracy of the regression, but the standard deviation of Kathy's turnout performance. The lesser the variance, the faster the R^2 value converges to 1; the greater the variance, the faster the R^2 value converges to zero.

This allows us to obtain the linear regression of any such set of data by simply knowing the mean and standard deviations of total turnout and ballots cast percentages for a candidate.



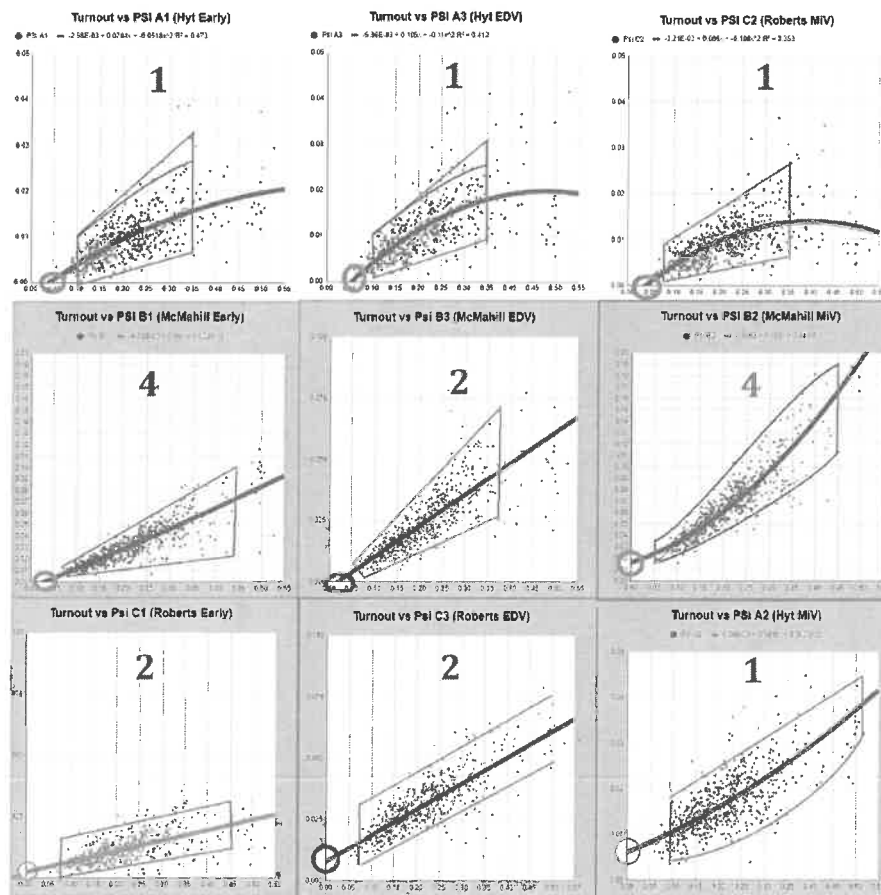
In the graphs below you can see the relationship between total precinct turnout (from 0% to 55% of registered voters) on the horizontal axis against the percentage of registered voters that turned out to vote for each candidate in each mode. The large green numbers, 1,2 and 4, tell you the relative scale of the y - axis. The number 1 implies that the y-axis extends from 0% to 5%, the number two implies from 0% to 10%, and the number 4 implies 0% to 20%.

The first three graphs on the top row are the natural inputs A_1, A_3, C_2 , that is, Hyt's Early Vote, Hyt's Election Day Vote and Robert's Mail-in Vote, reduced to the percentage of registered voters that turned out to vote in those categories. Notice that is quite easy to draw their bounding trapezoids by hand before the quadratic concavity overtakes them.

In the three graphs highlighted and bordered in yellow, we see the turnouts of B_1, B_3, C_1 , which are the illegal outputs of the first cubi manifold. Notice that the quadratic regressions of B_1 and B_3 against the total precinct turnout have a negative intercept, while the intercept of C_1 is positive. Also, observe that all of the intercepts of our natural inputs are negative. This informs us that the Neural Network was increasing the Ω_1 operators across the precincts, which increases C_1 with intensity, drawing from B_3 and the combined sum of A_1, A_3, C_2 , while raising the α_1 operators to lessen the draw from B_3 .

In the final graphs highlighted and bordered in gray, we see the turnouts of the final three illegal outputs, A_2, B_2, C_2 . The first thing we observe is that both A_2 and B_2 are concave up, this informs us that the Neural Network heavily increased the Ω_2 operators across the precincts, since both A_2 and B_2 are on the North Side and Ω is the North Side Horizontal Aggregate Percentage. We also see that the graph of C_3 has non-negligible positive intercept, but also lacks concavity, this tells us that the α_2 operators were decreased across the precincts, causing g to decrease, which means that C_3 will increase, since both B_2 and C_3 are on the west side; however, the increase in the Ω_2 operators must have been substantially greater than the decrease in the α_2 operators, and thus the southwest quarter, which is $u_2 = B_1 + B_3$, is what suffered the greatest relative loss, and hence the negative intercept of B_1 in the yellow graphs, since the draw into C_3 came primarily from $B_1 + B_3$.

Let us now briefly observe the comedy of these graphs, it says that Roberts Mail-in vote is always around one-third his Election Day Vote; however, McMahill gets three times as many Mail-in Votes as he does Election Day Votes, that is a ninefold ratio difference!



Our next step is restore C_1 , which is Roberts's Early Vote.

The reason we first restore C_1 is because it the output of the first cubic manifold, and since we know that Roberts received a legitimate Mail-in vote (relative to A_1 and A_3), we know that there are indeed people who support Roberts. Since C_1 is the output of the first cubic manifold, it is also the least distorted of the illegal outputs.

Remember that the vote totals in the second cubic manifold are scaled against the sum of the illegal outputs $u_2 = B_1 + B_3$, and that the proportion of this sum to $t_1 = C_1$ and $v_1 = A_1 + A_3 + C_2$ in the first cubic manifold is the aggregate percentage α_1 , where

$$\frac{(A_1 + A_3 + C_2) + C_1}{B_1 + B_3} = \frac{1 - \alpha_1}{\alpha_1}.$$

Thus, since the outputs of the second cubic manifold, A_2, B_2, C_3 , which are scaled against u_2 , and u_2 is scaled against $t_1 + v_1$, means, that by definition, A_2, B_2, C_3 are also scaled against $t_1 + v_1$. Hence, we start with C_1 , since this value is only rescaled once in the first cubic manifold, and was also the least important output of the Neural Network (since the Neural Network set g_1 instead of $(1 - h_1)$) as the output of the cubic manifold, where $g_1 = \frac{s_1}{s_1 + v_1}$; $(1 - h_1) = \frac{t_1}{u_1 + t_1}$.

To begin the restoration of C_1 we use the same intercept and concavity of the quadratic for C_2 , whilst retaining the linear constant of C_1

The quadratic regressions of the turnout percentage of Roberts' Mail-in Vote and Early vs the Total Turnout Percentage is:

$$w_1 = \overline{\Psi[C_2]} = k_0 + k_1 \Psi[T] + k_2 (\Psi[T])^2$$

$$w_2 = \overline{\Psi[C_1]} = z_0 + z_1 \Psi[T] + z_2 (\Psi[T])^2.$$

For the second equation we simply replace z_0 with k_0 and z_2 with k_2 , and retain z_1 .

$$w_3 = \overline{\Psi[C_1]} = c_0 + z_1 \Psi[T] + c_2 (\Psi[T])^2.$$

We then find the residuals of $\Psi[C_1]$ from w_2 , and the standard deviation of those residuals. We then find the standard deviation of the residuals of $\Psi[C_2]$ from w_1 , and then find the proportion of the standard deviations, and then rescale the $\Psi[C_1]$ residuals to in respect to the proportion of those standard deviations.

Finally, we add those rescaled residuals to w_3 and have, to the best our ability, in lieu of the **Nuclear Option**, restored the turnout percentage of C_1 . We now reset the actual integer values of C_1 against the integer values of the Registered Voters multiplied by the restored turnout percentages, and resolve the decimals values of the restored C_1 integers using the standard rules of rounding. Any negative integer returns are simply set to zero.

With C_1 restored, we can immediately restore C_3 from the $(m_{1,2,i}, m_{2,2,i}, m_{3,2,i})$ vectors. Recall that $m_{3,2,i} = \frac{C_{1,i}}{C_{1,i} + C_{3,i}}$, which is the restored proportion of C_1 to C_3 across the precincts, thus:

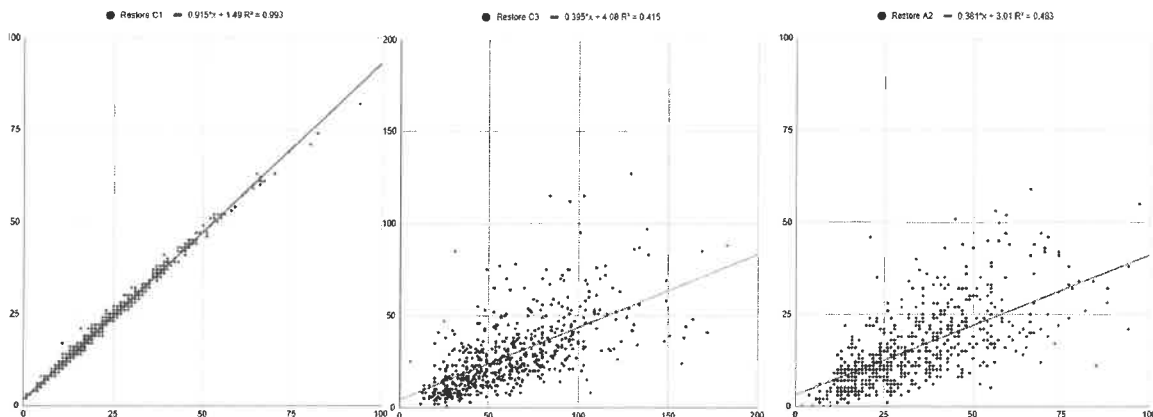
$$\left[\frac{C_3}{C_1} = \frac{1 - m_{3,2,i}}{m_{3,2,i}} \right] \Rightarrow \left[m_{3,2,i} C_3 = C_1 (1 - m_{3,2,i}) \right] \Rightarrow \left[C_3 = \frac{C_1 (1 - m_{3,2,i})}{m_{3,2,i}} \right]$$

With knowledge of the relative values of A_1, A_3, C_1, C_2, C_3 , we can now restore A_2 .

Let $n_{3,0,i} = \frac{C_2}{C_2 + (C_1 + C_3)}$, then we know the percentage of Mail-in Votes to Early and Election Day Votes for all candidates, in all races, across the precincts. In the same manner that we calculated the restoration vectors $(m_{1,2,i}, m_{2,2,i}, m_{3,2,i})$, we shall then do so for the n vectors, yielding $(n_{1,2,i}, n_{2,2,i}, n_{3,2,i})$. We now apply $n_{1,2,i} = \frac{A_2}{A_2 + (A_1 + A_3)}$ against A_1, A_3 to yield A_2 ; $\left[A_2 = \frac{(A_1 + A_3)(n_{1,2,i})}{(1 - n_{1,2,i})} \right]$

As expected, the C_1 values were the least disturbed. Robert's only received an 11% boost to his Early Vote Performance across the precincts from the first cubic manifold. The below graphs are the county recorder values of C_1, C_3, A_2 (horizontal axes, from left to right) against their restored values.

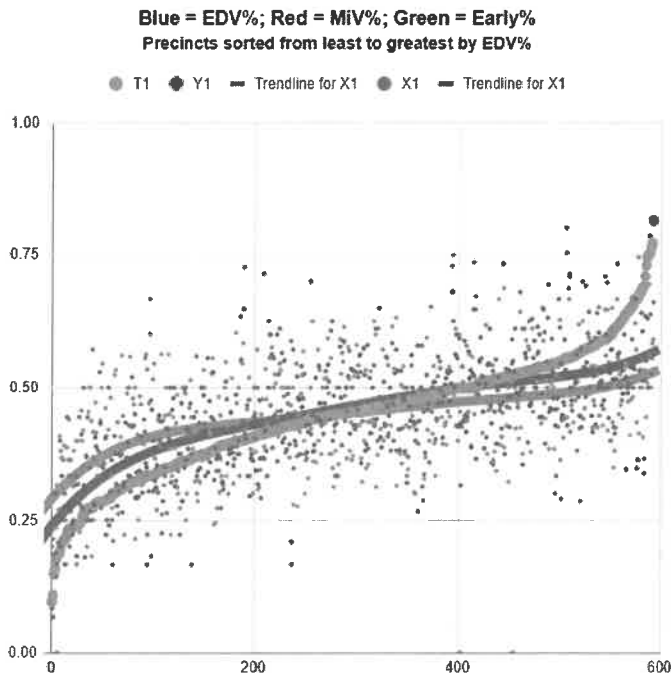
It shows that Robert's Election Day Votes and Hyt's Mail-in Votes were more than doubled from what they should have been. This is not surprising since both C_3 and A_2 are the outputs of second cubic manifold, which were leveraged against the the first cubic manifold, whose natural inputs were $v_1 = C_2, A_1, A_3$. The county-wide increasing both Ω_1 and Ω_2 in manifolds would convert into a massive spike of A_2 and C_3 ballots.



Amongst only Hyt and Roberts, with all of their vote totals restored, we can now project the true winner: Roberts won.

We can also see that the Election Day Percentage, Mail-in Percentage and Early Percentage, between only Hyt and Roberts are now strongly correlated in the below quantile plot, where the precincts were sorted from least to greatest by Hyt's Election Day Percent.

That is, the precincts now obey the expectation that Hyt's mode percentages are to be roughly equal to one another at any particular precinct, and we didn't even have to act on those percentages directly to achieve this. Amazing right!



Of course, we still have the problem of restoring B_1, B_2, B_3 . We must first recognize that all of McMahonill's vote totals were outputs in both of the manifolds.

Thus, it is possible that McMahonill did not receive a significant share of the votes in any precinct. If this is the case, then there will still be no correlations between the Election Day, Mail-in and Early Vote percentages of McMahonill against the restored values of Hyt and Roberts. Simulations of altered elections, making Jo Jorgenson win the 2020 Election in Peoria (IL), Maricopa, Atlanta and Clark and Washoe Counties, revealed that if a truly insignificant candidate is compelled to victory via Manifolds (the simulations used simple plane functions, instead of cubics), that there will no correlation at all between Jorgenson's Election Day, Early and Mail-in Percentages across the precincts.

However, if McMahonill was a significant candidate, then the restored values of Hyt and Roberts should reveal a tangible correlation between the Election Day, Mail-in and Early percentages that we can translate and rotate back to 45 degrees to obtain McMahonill's true performance. We shall examine the relationship between McMahonill and Roberts.

Let $s_{1,i} = C_{1,i} + C_{3,i}$, where $C_{1,i}$ and $C_{3,i}$ are the restored values.

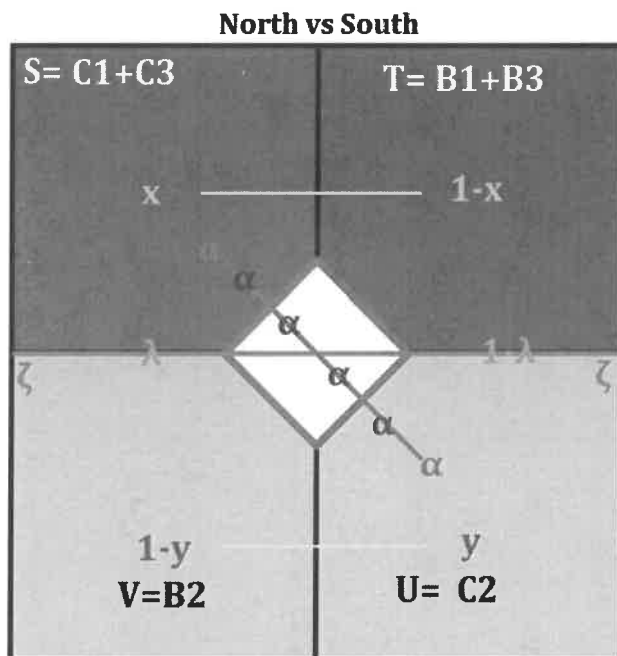
Let $t_{1,i} = B_{1,i} + B_{3,i}$.

Let $u_{1,i} = C_{2,i}$

Let $v_{1,i} = B_{2,i}$

Let $w_{1,i} = (1 - x_{1,i}) = \frac{t}{s+t}$, be McMahonill's intercessory combined Early and Election Day percentage.

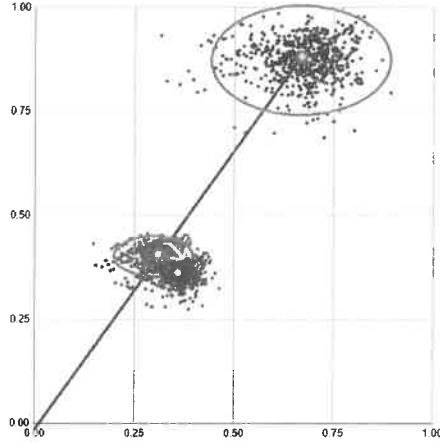
Let $z_{1,i} = (1 - y_{1,i}) = \frac{v}{u+v}$, be McMahonill's intercessory combined Mail-in percentage.



We now graph $(1 - x)$ vs $(1 - y)$ across the precincts. Since the relative value of A_2 was increased by a factor of 2.1429, the relative value of C_3 was increased by a factor of 2.1726, we assume that McMahill's vote relative vote totals were also increased by the same factor, since all of his votes were illegal outputs from the cubic manifolds (that is, not a single one of his vote totals were authentic).

We take the average of those two factors aforementioned, 2.1578, and take the vector from the origin to the midpoint of the precinct cloud in the $(1 - x)$ vs $(1 - y)$ graph, and divide that vector by 2.1578, and all of the distances of each precinct from that centroid by 2.1578, we do this because each precincts x, y value is acting as a complex number (thus the centroid distances were more than doubled).

We then rotate the centroid to the $x = y$ line, while preserving the precinct offsets (both direction and magnitude) from the rotated center.



To do the above set \bar{w} to average all of w_i and \bar{z} to the average of all z_i .

We now set the vector $(w_{2,i}, z_{2,i}) = (w_{1,i}, z_{1,i}) - (\bar{w}, \bar{z})$ for all precincts, the vectors $(w_{2,i}, z_{2,i})$ are the precinct offsets from the center.

Set $\theta = \text{ARCTAN} \frac{\bar{z}}{\bar{w}}$, and set $\phi = \frac{\pi}{4} - \theta$.

Now set $(w_{3,i}, z_{3,i}) = \left(\frac{w_{2,i}}{2.1578}, \frac{z_{2,i}}{2.1578} \right) + \left(\frac{\bar{w} \cos \phi - \bar{z} \sin \phi}{2.1578}, \frac{\bar{w} \sin \phi + \bar{z} \cos \phi}{2.1578} \right)$. These are the restored percentages.

Set $t_{2,i} = w_{3,i}(s_{1,i} + t_{1,i})$

Set $v_{2,i} = z_{3,i}(u_{1,i} + v_{1,i})$

Set $s_{2,i} = (s_{1,i} + t_{1,i}) - t_{2,i}$

Set $u_{2,i} = (u_{1,i} + v_{1,i}) - v_{2,i}$

Set $\beta_{1,i} = \frac{s_{1,i}}{s_{2,i}}$, this is the North Side S scale; set $\beta_{2,i} = \frac{u_{1,i}}{u_{2,i}}$, this is the South Side U scale.

Set $s_{3,i} = \beta_{1,i}(s_{2,i})$; set $t_{3,i} = \beta_{1,i}(t_{2,i})$, rounding $t_{3,i}$ to the nearest integer, using the standard rules of rounding.

Set $u_{3,i} = \beta_{2,i}(u_{2,i})$; set $v_{3,i} = \beta_{2,i}(v_{2,i})$, rounding $v_{3,i}$ to the nearest integer, using the standard rules of rounding.

The value of $v_{3,i}$ is the restored value of B_2 , which is McMahill's Mail-in Vote.

We now split $t_{3,i} = B_1 + B_3$ via (remember that crazy thing at the start of this process, about the ratio of A_1 and A_3 !!!)

$$\left[\frac{B_1}{B_1 + B_3} = m_{2,2,i} \right] \Rightarrow [B_1 = m_{2,2,i}(t_{3,i})] \Rightarrow [B_3 = (1 - m_{2,2,i})(t_{3,i})]$$

And we're done...almost. Just one more step!

The Neural Network will undoubtedly have learned over the course of its self-training trials to preserve the original number of total ballots cast in each race down the ballot, while ensuring that the new Mail-in, Election Day and Early Vote totals match each other down the ballot as well.

The choice to increase or decrease $\alpha_1, \Omega_1, \alpha_2, \text{ or } \Omega_2$ within either of the Sheriff's Cubic Manifolds is therefore not made in isolation concerning the Sheriff's race, but rather it is an intense balancing act of producing all of the selected winners down the entire ballot, while making the Mail-in, Early and Election Day totals match in each race in each precinct, while also preserving the total number of ballots that were cast to minimize the creation and destruction of ballots.

The most obvious solution to this problem would be to rescale all the relative totals in each precinct until their sum matched the original sum of all ballots cast. It is impossible to believe that the Neural Network would have found any other way to accomplish this.

Also remember that the Neural Network is not obliged (nor would conclude in self-training) that it must preserve the relative values of A_1 to A_3 to C_2 between precincts. It only needs to preserve those proportions within a precinct itself, not between precincts. With all of the above in mind, this why there is almost zero correlation between the candidates Election Day, Mail-in and Early Percentages, because this localized min-maxing of $\alpha_1, \Omega_1, \alpha_2, \Omega_2$ is done within a precinct, not between them (with the only exception being that net sum of votes across the county produces the intended winner, the primary objective of the Neural Network).

Undoubtedly, the Neural Network will place higher emphasis on matching the number of Mail-in, Election Day and Early ballots, since a human would have instructed it to place a higher emphasis on this mission, as it would seem strange if there was ten times as many Mail-in ballots for the Sheriff's race than the Governor's Primary across the precincts.

However, it would also seem just as strange if total voter turnout for the Sheriff's race was also tens higher than the Governor's primary, hence the Neural Network will also strive to preserve the original number of ballots cast in each race.

We now perform the final step of the Sheriff Restoration:

Let $Y_{1,i}$ the sum of the County Recorder values of $A_1, A_2, A_3, B_1, B_2, B_3, C_1, C_2, C_3$ in each precinct.

Let $Y_{2,i}$ the sum of the County Recorder values of A_1, A_3, C_2 and the restored values of $A_2, B_1, B_2, B_3, C_1, C_3$ in each precinct.

$$\text{Let } \Lambda_i = \frac{Y_{1,i}}{Y_{2,i}}.$$

In each precinct, multiply County Recorder values of A_1, A_3, C_2 and the restored values of $A_2, B_1, B_2, B_3, C_1, C_3$ by Λ_i . Then round these values to the nearest integer, using the standard rules of rounding.

We have now restored the Sheriff's 2022 Election in Clark County, Nevada, and Roberts is the rightful winner.

Results	Original Totals	Restored Totals
A1	11627	30715
A2	20748	25064
A3	13275	33776
B1	37509	20701
B2	82460	15887
B3	28967	23933
C1	13901	35478
C2	11290	28463
C3	36953	42733
Candidates	Original	Restored
Hyt	45650	89555
McMahill	148936	60521
Roberts	62144	106674
Mode	Original	Restored
Early	63037	86894
MailV	114498	69414
EDV	79195	100442

Preface Equation 0.2.1: The Trivariate Real Number Cubic Turnout Manifold, US Senate

Let Candidate A be Sam Brown; let Candidate B be Cortez; let Candidate C be Laxalt.

Let A_1, A_2, A_3 be Brown's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let B_1, B_2, B_3 be Cortez's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let C_1, C_2, C_3 be Laxalt's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let $s_1 = A_1$

Let $t_1 = (B_1 + B_3)$

Let $u_1 = A_3$

Let $v_1 = (C_1 + C_3)$; this is the input square.

Let R be the number of registered voters at the precinct.

$$m_1 = \frac{s_1}{s_1 + u_1}, n_1 = \frac{t_1}{t_1 + v_1}, \alpha_1 = \frac{s_1 + u_1}{(s_1 + u_1) + (t_1 + v_1)}, \Omega_1 = \frac{s_1 + t_1}{(s_1 + t_1) + (u_1 + v_1)}, \lambda_1 = \frac{s_1 + v_1}{(s_1 + v_1) + (u_1 + v_1)}$$

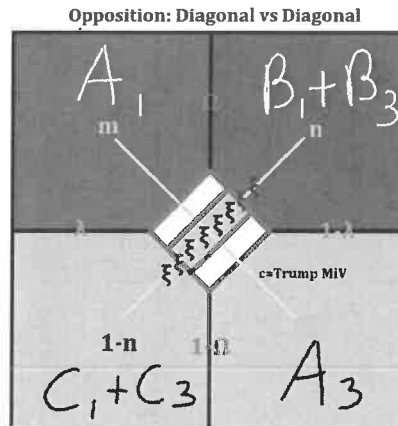
$$\xi_1 = \frac{t_1 + v_1}{s_1 + u_1} = \frac{1 - \alpha_1}{\alpha_1}, \quad w_1 = (1 - n_1) = \frac{v_1}{t_1 + v_1}; \quad \Psi = \frac{s_2 + u_2}{R}$$

In a fair election:

$$n = \Omega + \xi(\Omega - m) = \frac{\Omega - \alpha m}{1 - \alpha} = \frac{(\xi + 1)(\Omega - \lambda) + \xi}{2\xi}; \quad w = \lambda + \xi(\lambda - m) = \frac{(\xi + 1)(\lambda - \Omega) + \xi}{2\xi}$$

In the above sequence of equalities, three of the five proportions must always be known to resolve n_1 , however, in Clark County we obtain the illegal cubic manifold equations that yields n_1 with Ω_1 and λ_1 without either α_1 nor m_1 .

Even more outrageous is that the R^2 of this function is rather low, until a third parameter, Ψ , is added. Taking an R^2 of bivariate plane and quadratic of Ω_1 and λ_1 unto n_1 from below 0.99, all the way to 0.998. To ensure there wasn't a trivial correlation with Ψ , artificially increasing the R^2 value, the number of registered voters was randomized across the precincts in tens of millions of simulations, without changing the number of ballots cast, and there was no significant increase in R^2 in any of these trials. Thus, this formula works with, and only with, the precise number of registered voters present in each Clark County precinct.



The trivariate cubic equation will have $w_1 = 1 - n_1$ isolated on the right-hand side. In the diagram on the previous page, w_1 is the Light Blue Diagonal Percentage, that is the percentage share of ballots that belong to v_1 amongst t_1 and v_1 , $w_1 = \frac{v_1}{t_1+v_1}$, in other words, this is the share of Early and Election Day ballots that Laxalt shall receive against the number of Early and Election Day ballots of both Laxalt and Cortez.

As to how we discern between whether or not t_1 or v_1 was the input square, is to compare the ratios of $C_1:C_3$ and $B_1:B_3$ to Hyt's $A_1:A_3$ ratio in the Sheriff's race. From this we learn that the histogram and quantile plots of $C_1:C_3$ have an identical match to Hyt's results in the Sheriff's race, while the histogram and quantile plots Cortez's $B_1:B_3$ ratios are alien, furthermore that there is zero correlation between Cortez's $B_1:B_3$ ratios and either Hyt's $A_1:A_3$ or Laxalt's $C_1:C_3$ ratios (also recall that Hyt's $A_1:A_3$ ratio was authentic, since Hyt's A_1, A_3 were logically compelled to be the only authentically input source).

As to the presence of the Ψ parameter, it informs us that this Equation determines the voter turnout in each precinct, to which all other races down the ballot shall be attuned to (whereas the Sheriff's race established the proportion of Early to Mail-in to Election Day ballots cast in each precinct, the Senate Race establishes the proportion of Democrat to Republican Ballots in the partisan primaries and the precinct turnout in all primaries, both partisan and non-partisan).

Once the w_1 proportion is illegally resolved from the cubic surface of Ω_1, λ_1 and Ψ , both m_1 and α_1 are compelled into existence, since in any election, fair or unfair:

$$W = \frac{(\xi+1)(\lambda-\Omega)+\xi}{2\xi} \Rightarrow \xi = \frac{\Omega-\lambda}{(\lambda-\Omega+1-2w)}; m = \lambda + \xi(\lambda - w); w = 1 - n = \frac{v}{t+v}$$

Since the proportions, w_1, Ω_1, λ_1 are known, it compels the value of ξ_1 , which is proportion of Blue Diagonal to Red Diagonal Ballots, that is $\xi_1 = \frac{t_1+v_1}{s_1+u_1}$, is now forced, and since $\alpha_1 = \frac{1}{1+\xi_1}$, then Brown's aggregate percentage share of the ballots in this ballot set is also compelled (Brown is the algorithmically intended loser).

Since ξ_1, w_1, λ_1 are known, it forces the value of m_1 , which is the percentage of s_1 ballots amongst s_1 and u_1 and tells us proportion of s_1 to u_1 ballots via the identity: $\frac{s_1}{u_1} = \frac{m_2}{1-m_2}$. Since the value of t_1 is known (the input square), the values of s_2, u_2 and v_2 are also known, as the pairwise proportions betwixt them have all been forced.

The illegal trivariate cubic equation is as follows, with an $R^2 = 0.998666$ (video on next is the 4D surface that the Clark County precincts rest upon when their Ω, λ, w values are plotted in x, y, z space respectively, with Ψ acting as the fourth dimension) The residual values have a left-tailed Poisson distribution, and the residual errors come from, and only from, whether or not they rounded the illegally calculated vote totals up or down to the nearest integer.

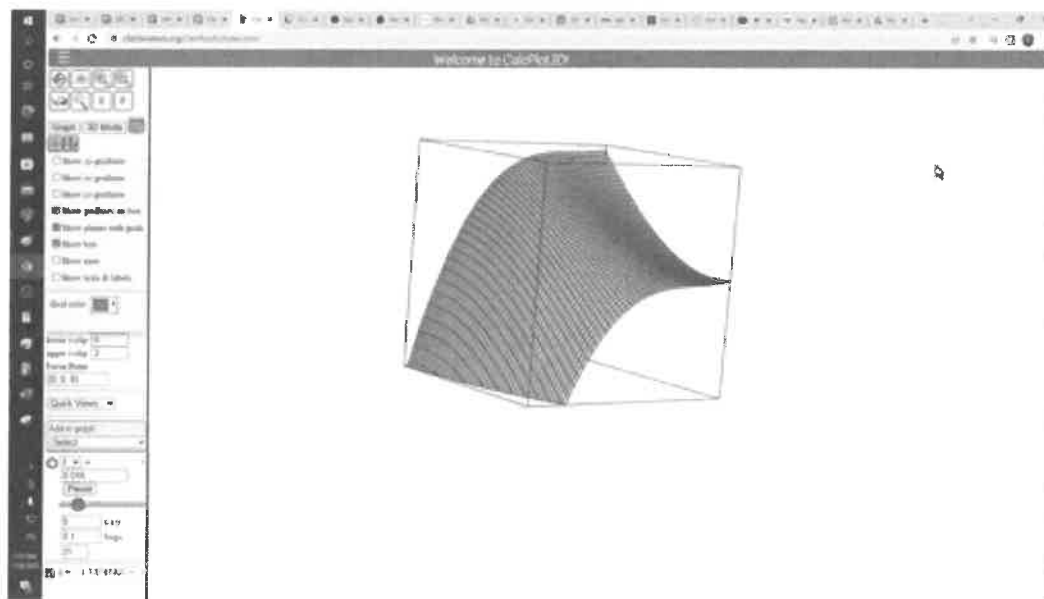
$$W = \sum_{k=0}^{k=3} \left(\sum_{j=0}^{j=k} \left(\sum_{t=0}^{t=k-j} \left((z_{k,j,((k-j)-t)}) (\Psi^{(k-j)-t}) (\Omega^t) (\lambda^j) \right) \right) \right); z_{k,j,t} \in \mathbb{R}$$

$z_{0,0,0}$	$z_{1,0,0}$	$z_{1,0,1}$	$z_{1,1,0}$		
-1.13741914767888	-0.603407714515924	2.33501596981659	7.38865441852249		
$z_{2,0,0}$	$z_{2,0,1}$	$z_{2,0,2}$	$z_{2,1,0}$	$z_{2,1,1}$	$z_{2,2,0}$
69.9462999161332	-14.6467141937464	-0.917356759338873	12.0015396345406	-9.16489580692723	-9.01806410681456
$z_{3,0,0}$	$z_{3,0,1}$	$z_{3,0,2}$	$z_{3,0,3}$		
288.161113813985	-24.8740476649254	6.07211023080162	-0.269537406940344		
$z_{3,1,0}$	$z_{3,1,1}$	$z_{3,1,2}$	$z_{3,2,0}$	$z_{3,2,1}$	$z_{3,3,0}$
-148.440286412835	8.10273581556975	2.25169584417017	-5.55677292495965	6.71125826193019	3.71284521219786

Since the average reader of this article shall not be aware of the implications of a trivariate cubic manifold input, with a single output, it means that there is a continuous smooth four-dimensional surface upon which the precincts sit.

The fourth dimension of this manifold is the percentage of registered voters that cast their early or election day ballots for Brown. As this percentage increases from 00.00% to 15.00%, the 3D surface of Ω, λ, w (the x, y, z axes) upon which the precincts lay changes smoothly, without any erratic discontinuities or massive accelerations.

As to whether or not a 19 vector regression is justified, bear in mind that 16 of those vectors are products and powers of only three input vectors, and that attempting a lower degree (linear and quadratic with $k = 1$ or 2), yielded residuals with a distinct and pronounced cubic curvature, this would be like asking me to fit a straight line to approximate the shape of a hockey stick.

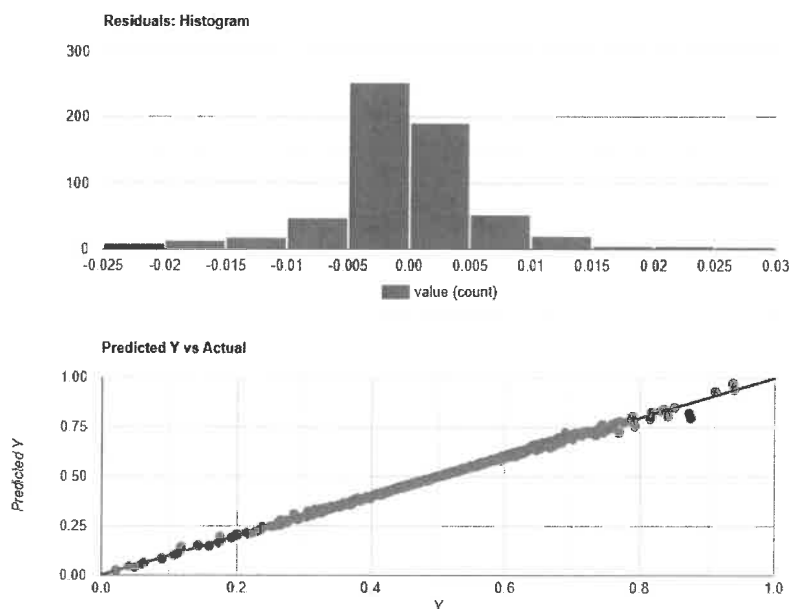


1. Y and X relationship

R square (R^2) equals **0.9973342946**. It means that the predictors (X_i) explain 99.7% of the variance of Y .

Adjusted R square equals **0.9972466676**.

The coefficient of multiple correlation (R) equals **0.9986662579**. It means that there is a very strong correlation between the predicted data (\hat{y}) and the observed data (y).



Preface Equation 0.2.2; The Bivariate Real Number Quadratic Manifold, US Senate

Let Candidate A be Sam Brown; let Candidate B be Cortez; let Candidate C be Laxalt.

Let A_1, A_2, A_3 be Brown's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let B_1, B_2, B_3 be Cortez's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let C_1, C_2, C_3 be Laxalt's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let $s_1 = B_2$

Let $t_1 = C_2$

Let $u_1 = B_1 + B_3$; this is the input. B_1 and B_3 were illegally determined in the prior equation.

Let $v_1 = (A_1 + A_3 + C_1 + C_3) + A_2$; Direct subtraction from v_1 shall yield A_2 as an output.

$$g_1 = \frac{s_1}{s_1+v_1}, h_1 = \frac{u_1}{u_1+t_1}, \alpha_1 = \frac{s_1+u_1}{(s_1+u_1)+(t_1+v_1)}, \Omega_1 = \frac{s_1+t_1}{(s_1+t_1)+(u_1+v_1)}, \lambda_1 = \frac{s_1+v_1}{(s_1+v_1)+(u_1+v_1)}$$

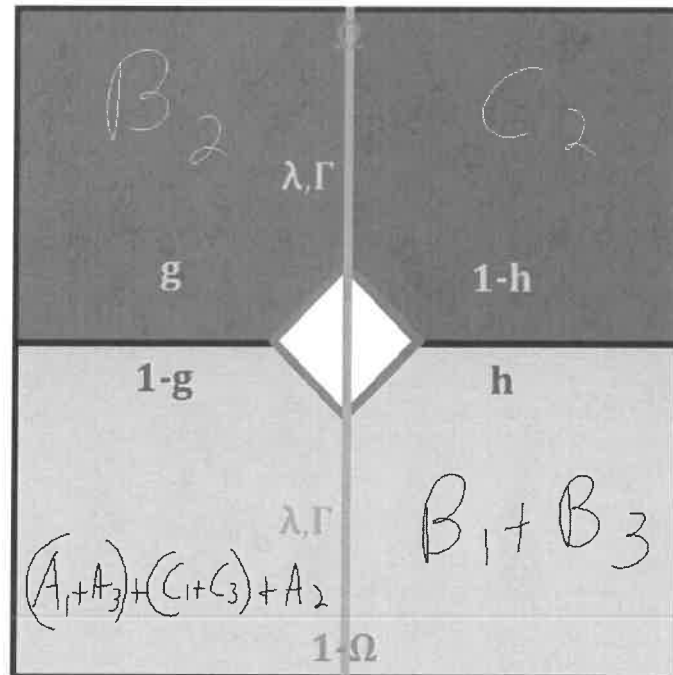
$$\Gamma_1 = \frac{u_1+t_1}{s_1+v_1} = \frac{1-\lambda_1}{\lambda_1}, \quad w_1 = (1 - h_1) = \frac{t_1}{u_1+t_1}$$

In a fair election:

$$g = \alpha + \Gamma(\alpha - h) = \frac{\alpha-(1-\lambda)h}{\lambda} = \Omega + \Gamma(\Omega - w) = \frac{\Omega-(1-\lambda)w}{\lambda} = \frac{(\Gamma+1)(\Omega+\alpha)-\Gamma}{2}$$

In the above sequence of equalities, three of the five proportions must always be known to resolve g_1 , however, in Clark County we obtain the illegal quadratic manifold equations that yields g_1 with only α_1 and Ω_1 (see next page).

West vs East



The bivariate quadratic equation will have g isolated on the right-hand side. In the diagram on the previous page, g is the West Side Percentage, that is the percentage share of ballots that belong to s amongst s and v , $g = \frac{s}{s+v}$.

Once g is illegally resolved from the cubic surface of α, Ω , both h and λ are compelled into existence, since in any election, fair or unfair:

$$g = \frac{(\Gamma+1)(\Omega+\alpha)-\Gamma}{2} \Rightarrow \Gamma = \frac{2g-\Omega-\alpha}{(\Omega+\alpha-1)}; h = \alpha + \Gamma^{-1}(\alpha - g); w = 1 - h = \frac{t}{u+t}$$

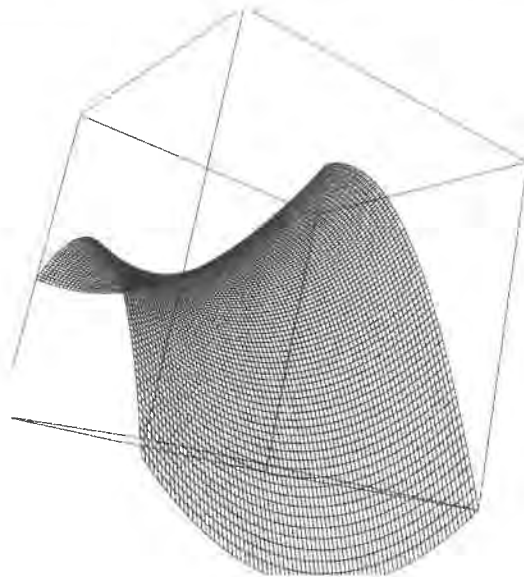
Since the proportions, g_1, α_1, Ω_1 are known, it forces the value of Γ_1 , which is proportion of East Side Ballots to West Side Ballots, that is $\Gamma_1 = \frac{u_1+t_1}{s_1+v_1}$, is now forced. Since s_1 and v_1 are both known at this stage, then so the sum of u_1 and v_1 .

Since Γ_1, α_1, g_1 are known, it forces the value of h_1 , which is the percentage of u_1 ballots amongst u_1 and t_1 . Since the sum of u_1 and t_1 is already known, and h_1 tells us proportion of t_1 to u_1 ballots via the identity: $\frac{t_1}{u_1} = \frac{1-h_1}{h_1}$, then we know the values of u_1 and t_1 .

The illegal bivariate quadratic equation is as follows, with an $R^2 = 0.9983801128$ (image below is the 3D surface that the Clark County precincts rest upon when their α, Ω, g values are plotted in x, y, z space respectively. The residual values have a perfect normal distribution, and the residual errors come from, and only from, whether or not they rounded the illegally calculated vote totals up or down to the nearest integer.

$$g = k_0 + k_1\Omega + k_2\alpha + k_3\Omega^2 + k_4\alpha\Omega + k_5\alpha^2$$

k_0	k_1	k_2	k_3	k_4	k_5
-0.1590436749	+0.8413736582	+0.4076454491	-0.28055677	+0.1852754507	+0.2240821095

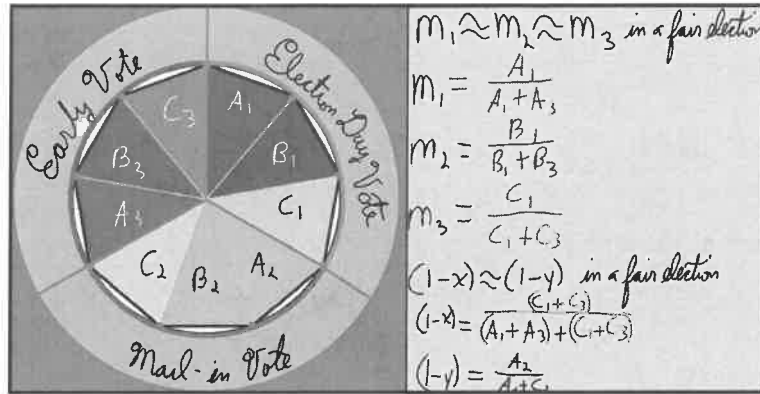


After the execution of this formula, the following values are known:

Illegally Calculated Inputs are: $(A_1 + A_3); (B_1 + B_3)$

Illegal Outputs are: A_2, B_2, C_2

Natural Inputs: C_1, C_3



Preface Restoration Algorithm 0.2.3; Restoring the Senate Election

© 2022, Senate Restoration, Clark County, Nevada

https://docs.google.com/spreadsheets/d/1cXM7j9T-Pp_6pLWBCABC1fR5EEn8dt92RcqipHofjs0/edit?usp=sharing

Since we have the advantage of the restored Sheriff's Race, the restoration of the Senate race is far easier, as we can import the ratio of Early to Mail-in to Election Day ballots in each precinct.

Since the second manifold equations informs us that all mail-in totals, A_2, B_2, C_2 , are illegitimate output, we first act to restore the Early and Election Day Totals, and as there is no correlation between Laxalt's and Browns Election Day, Early and Mail-in Percentages, we first restore the relationship between Laxalt and Cortez, since they are correlated, and we know Laxalt's Early and Election Day ratio to not only be preserved, but also identical to Hyr's Early to Election Day ratio in the Sheriff's race.

Is it not surprising that the two candidates, from different races, whose Early to Election Day Ratios were preserved as inputs into their respective manifolds, have nearly identical values?

Let $x_{1,i} = \frac{C_1}{C_1 + B_1}$ be Laxalt's Early Vote Percentage amongst Laxalt and Cortez in each precinct.

Let $y_{1,i} = \frac{C_3}{C_3 + B_3}$ be Laxalt's Election Day Percentage amongst Laxalt and Cortez in each precinct.

Let $\overline{y_{1,i}} = k_0 + k_1(x_{1,i}) + k_2(x_{1,i})^2 + k_3(x_{1,i})^3$ be the cubic regression of $y_{1,i}$.

For Clark County: $k_0 = 0.0298$; $k_1 = 2.24$; $k_2 = -2.91$; $k_3 = 1.72$

Let $u_{0,i} = x_{1,i}$; $v_{0,i} = \overline{y_{1,i}} - k_0$, this removes the intercept advantage for Cortez.

Let $r_{0,i} = y_{1,i} - \overline{y_{1,i}}$, this restores the residual value.

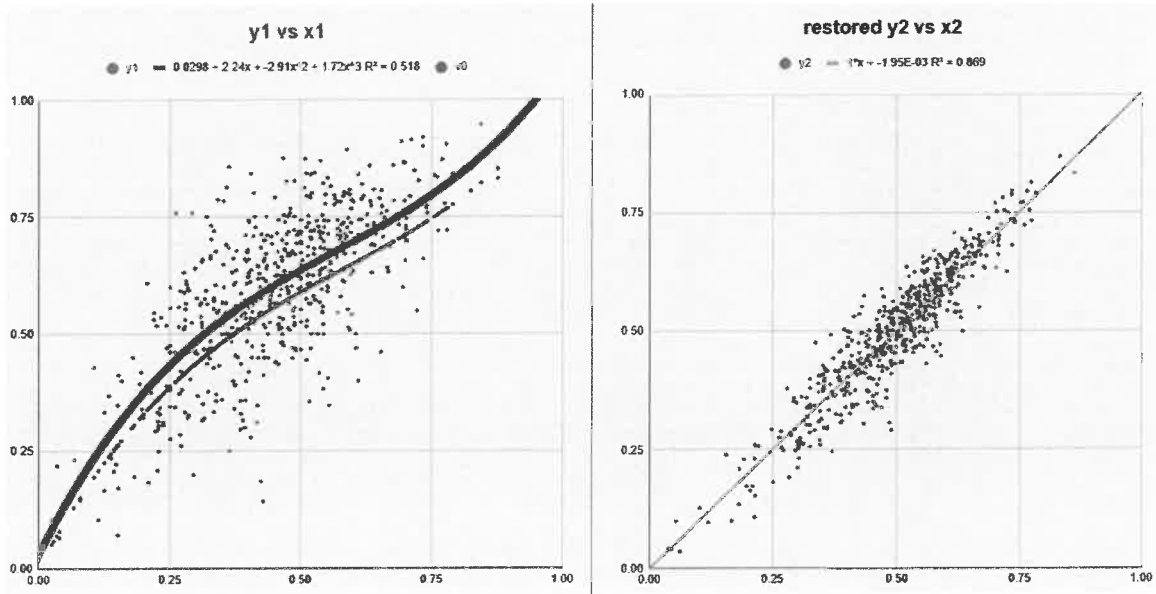
Let σ be the standard deviation of all $r_{0,i}$. If $\theta > 5\%$, then scale all residuals uniformly by $\frac{5\%}{\sigma}$.

Set $\theta_i = \frac{\pi}{4} - \text{ARCTAN}\left(\frac{v_{0,i}}{u_{0,i}}\right)$ for all precincts.

Set $u_{1,i} = u_{0,i} \cos \theta_i - v_{0,i} \sin \theta_i$; $v_{1,i} = u_{0,i} \sin \theta_i + v_{0,i} \cos \theta_i$. This smashes the cubic into the $y = x$ line, while preserving the magnitude of the hijacked vector.

We now set $(x_{2,i}, y_{2,i}) = (u_{1,i}, v_{1,i})$. If either coordinate is above or below 0% to 100%, then we reset to 0 to 1 respectively. These are the restored percentages.

Below is the graph of the original Early Vote Percentage (horizontal axis) vs the original Election Day Percentage (vertical axis) on the left side, the restored percentages on the right side after the algorithm on the above page is executed.



Now we set $d_i = C_1 + B_1$, the total number of Early Ballots for Laxalt and Cortez in each precinct.

Now we set $f_i = C_3 + B_3$, the total number of Election Day Ballots for Laxalt and Cortez in each precinct.

Let $s_i = (x_{2,i})(d_i)$ be Laxalt's Intercessory Early Vote in each precinct.

Let $t_i = d_i - s_i$ be Cortez's Intercessory Early Vote in each precinct.

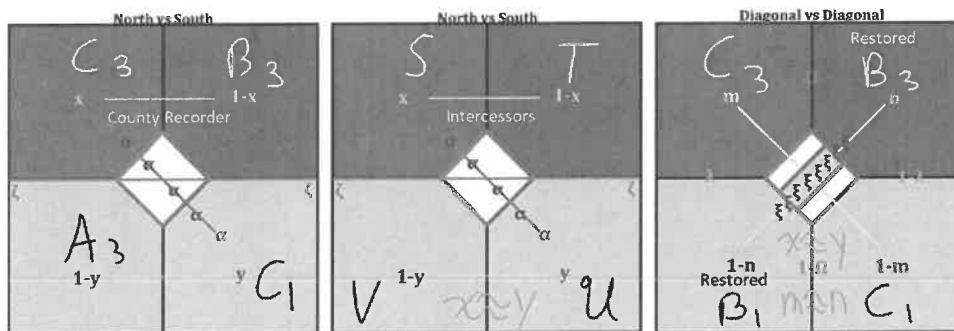
Let $u_i = (y_{2,i})(f_i)$ be Laxalt's Intercessory Election Day Vote in each precinct

Let $v_i = f_i - u_i$ be Cortez's Intercessory Election Day Vote in each precinct

Let $Z_{1,i} = \frac{C_3}{s_i}$ be the North Side Scale in each precinct.

Let $Z_{2,i} = \frac{C_1}{u_i}$ be the South Side Scale in each precinct.

Let $C_{1,2,i} = z_{1,i}(s_i)$; $B_{1,2,i} = z_{1,i}(t_i)$; $C_{3,2,i} = z_{2,i}(u_i)$; $B_{3,2,i} = z_{2,i}(v_i)$, each rounded to the nearest integer, be the restored Early and Election Day totals of Laxalt and Cortez.



Seeing that Laxalt's $C_1 : C_3$ ratio is nearly identical to Hyt's $A_1 : A_3$ and Robert's $C_1 : C_3$ ratios in the Sheriff's Primary, and that Cortez's $B_1 : B_3$ ratio also matches, we know that is safe to import Robert's $C_2 : (C_1 + C_3)$ ratio from the Sheriff's Primary to yield Laxalt's and Cortez's Mail-in totals in the Senate race.

Recall that $n_{3,2,i} = \frac{c_2}{c_2 + (c_1 + c_3)}$ is Robert's Mail-in to combined Early+EDV total in the Sheriff's race.

Let $C_{2,2,i} = \left(\frac{n_{3,2,i}}{1 - n_{3,2,i}} \right) (C_{1,2,i} + C_{3,2,i})$, which is the product of Robert's n percentage with the sum of Laxalt's Early and Election Day Vote, be Laxalt's restored Mail-in Vote.

Let $B_{2,2,i} = \left(\frac{n_{3,2,i}}{1 - n_{3,2,i}} \right) (B_{1,2,i} + B_{3,2,i})$, which is the product of Robert's n percentage with the sum of Cortez's Early and Election Day Vote, be Cortez's restored Mail-in Vote.

We now have the restored totals for Laxalt and Cortez, in all modes of voting. We now proceed to restore Brown's totals.

Let $q_{1,i} = \frac{C_{1,2,i}}{C_{1,2,i} + C_{3,2,i}}$; $q_{2,i} = \frac{B_{1,2,i}}{B_{1,2,i} + B_{3,2,i}}$ be Laxalt's and Cortez's Early to EDV ratio in each precinct.

Since $q_{1,i} \approx q_{2,i}$ across the precincts, let $q_{3,i} = \frac{1}{2}(q_{1,i} + q_{2,i})$ be Brown's Early to EDV ratio in each precinct.

Let $w_i = A_{1,0,i} + A_{3,0,i}$ be the sum of the County Recorder totals for Brown's Early and EDV ballots.

Let $A_{1,1,i} = (q_{3,i})(w_i)$ be Brown's Intercessory Early Vote, rounded to the nearest integer.

Let $A_{3,1,i} = w_i - A_{1,1,i}$ be Brown's Intercessory Early Vote.

Let $A_{2,1,i} = \left(\frac{n_{3,2,i}}{1 - n_{3,2,i}} \right) (w_i)$, which is the product of Robert's n percentage with the sum of Brown's Early and Election Day Vote, be Brown's intercessory Mail-in Vote.

Although we've restored the proportions of $A_1 : A_2 : A_3$, we do not yet know the proportion of the sum of all of Laxalt's and Cortez's ballots to Brown's. Thankfully, the solution to this is rather easy.

Let Λ_i be the total sum of ballots cast in each precinct in the county recorder data for Laxalt, Cortez and Brown.

Let ρ_i be the total sum of restored ballots for Laxalt and Cortez.

Let $\Delta_i = \Lambda_i - \rho_i$, be the difference of Laxalt's and Cortez's restored totals from the Total Ballots Cast.

Let ω_i be the total sum of county recorder ballots for Brown.

Let $Z_{3,i} = \frac{\Delta_i}{\omega_i}$ be the Great Scale in each precinct.

Let $A_{1,2,i} = Z_{3,i}(A_{1,1,i})$; $A_{2,2,i} = Z_{3,i}(A_{2,1,i})$; $A_{3,2,i} = Z_{3,i}(A_{3,1,i})$ be the restored values of Brown's Early, Mail-in and Election Day Totals in each precinct.




In Columns O:Y on the *Original Data* sheet, the restored values can be found: https://docs.google.com/spreadsheets/d/1cXM7j9T-Pp_6pEWBCABC1fR5EE8dt92RcqpHofjs0/edit?usp=sharing

Results	Brown Early	Brown Mail	Brown EDV	Cortez Early	Cortez Mail	Cortez EDV	Laxalt Early	Laxalt Mail	Laxalt EDV
Original	12409	15115	9780	22531	71055	13711	20545	27653	23449
Restored	35361	25665	39015	17845	15134	20337	20343	17270	22815

Results	Brown	Laxalt	Brown's%	Republican	Democrat	Republican %	Early%	MIV%	EDV%
Original Total	37304	71647	34.2392%	108951	107297	50.3824%	25.66%	52.64%	21.71%
Restored Total	100041	60428	62.3429%	160469	53316	75.0609%	34.40%	27.16%	38.43%




Results	Brown	Cortez	Laxalt	Brown's Margin
Original Total	37304	107297	71647	-34343
Restored Total	100041	53316	60428	+39613

Although the action of the manifolds to upset the winner of the election is always a sad sight, what is most striking about this restoration is that percentage of Republican ballots cast increased from 50.38%, which is a 1:1 ratio of Democrats to Republicans, to 75.06%, which is a 3:1 ratio of Republicans to Democrats, and demonstrates that such a massive change was indeed possible in the 2020 General Election.

Candidate	Votes	Pct.
 Adam Laxalt 	112,504	55.7%
 Sam Brown	69,519	34.4
Sharelle Mendenhall	6,149	3.0
Total reported	201,832	

Let us now subtract 11219 ballots from Adam Laxalt's Statewide total, and add 62,737 ballots to Sam Brown's Statewide total.

Of course, assuming that Washoe and the other Counties of Nevada conducted fair elections...

Candidate	Votes	Pct.
 Adam Laxalt 	101,285	55.7% 43.37%
 Sam Brown	132,256	34.4 56.63%
Sharelle Mendenhall	6,149	3.0
Total reported	201,832	

Preface Equation 0.3.1; The Trivariate Real Number Cubic Turnout Manifold, Governor

Let Candidate A be Gilbert; let Candidate B be Sisolak; let Candidate C be Lombardo.

Let A_1, A_2, A_3 be Gilbert's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let B_1, B_2, B_3 be Sisolak's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let C_1, C_2, C_3 be Lombardo's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let $s_1 = A_1$

Let $t_1 = (B_1 + B_3)$

Let $u_1 = A_3$

Let $v_1 = (C_1 + C_3)$; this is the input square.

Let R be the number of registered voters at the precinct.

$$m_1 = \frac{s_1}{s_1 + u_1}, n_1 = \frac{t_1}{t_1 + v_1}, \alpha_1 = \frac{s_1 + u_1}{(s_1 + u_1) + (t_1 + v_1)}, \Omega_1 = \frac{s_1 + t_1}{(s_1 + t_1) + (u_1 + v_1)}, \lambda_1 = \frac{s_1 + v_1}{(s_1 + v_1) + (u_1 + v_1)}$$

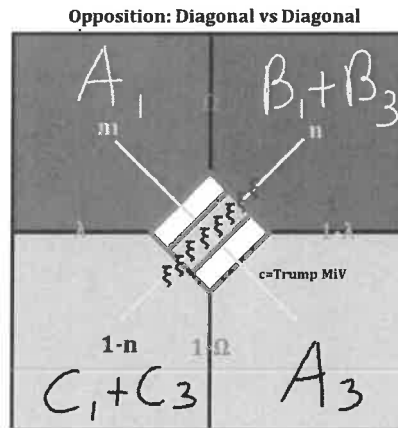
$$\xi_1 = \frac{t_1 + v_1}{s_1 + u_1} = \frac{1 - \alpha_1}{\alpha_1}, \quad w_1 = (1 - n_1) = \frac{v_1}{t_1 + v_1}; \quad \Psi = \frac{s_2 + u_2}{R}$$

In a fair election:

$$n = \Omega + \xi(\Omega - m) = \frac{\Omega - \alpha m}{1 - \alpha} = \frac{(\xi + 1)(\Omega - \lambda) + \xi}{2\xi}, \quad w = \lambda + \xi(\lambda - m) = \frac{(\xi + 1)(\lambda - \Omega) + \xi}{2\xi}$$

In the above sequence of equalities, three of the five proportions must always be known to resolve n_1 , however, in Clark County we obtain the illegal cubic manifold equations that yields n_1 with Ω_1 and λ_1 without either α_1 nor m_1 .

Even more outrageous is that the R^2 of this function is rather low, until a third parameter, Ψ , is added. Taking an R^2 of bivariate plane and quadratic of Ω_1 and λ_1 unto n_1 from below 0.99, all the way to 0.998. To ensure there wasn't a trivial correlation with Ψ , artificially increasing the R^2 value, the number of registered voters was randomized across the precincts in tens of millions of simulations, without changing the number of ballots cast, and there was no significant increase in R^2 in any of these trials. Thus, this formula works with, and only with, the precise number of registered voters present in each Clark County precinct.



The trivariate cubic equation will have $w_1 = 1 - n_1$ isolated on the right-hand side. In the diagram on the previous page, w_1 is the Light Blue Diagonal Percentage, that is the percentage share of ballots that belong to v_1 amongst t_1 and v_1 , $w_1 = \frac{v_1}{t_1+v_1}$, in other words, this is the share of Early and Election Day ballots that Lombardo shall receive against the number of Early and Election Day ballots of both Lombardo and Sisolak.

As to how we discern between whether or not t_1 or v_1 was the input square, is to compare the ratios of $C_1:C_3$ and $B_1:B_3$ to Hyt's $A_1:A_3$ ratio in the Sheriff's race. From this we learn that the histogram and quantile plots of $C_1:C_3$ have an identical match to Hyt's results in the Sheriff's race, while the histogram and quantile plots Sisolak's $B_1:B_3$ ratios are alien, furthermore that there is zero correlation between Sisolak's $B_1:B_3$ ratios and either Hyt's $A_1:A_3$ or Lombardo's $C_1:C_3$ ratios (also recall that Hyt's $A_1:A_3$ ratio was authentic, since Hyt's A_1, A_3 were logically compelled to be the only authentically input source).

As to the presence of the Ψ parameter, it informs us that this Equation determines the voter turnout in each precinct, and this the general form of this trivariate cubic is identical to the Senate Race (but with a vastly different set of constants), which also invoked the same Ψ parameter, part of the Neural Network's cost function was to make most similar the Republican and Democrat turnouts of the Senate and the Governor Race, while adhering to the proportion of Early to Mail-in to Election Day ballots made manifest by the Sheriff Race.

Once the w_1 proportion is illegally resolved from the cubic surface of Ω, λ_1 and Ψ , both m_1 and α_1 are compelled into existence, since in any election, fair or unfair:

$$W = \frac{(\xi+1)(\lambda-\Omega)+\xi}{2\xi} \Rightarrow \xi = \frac{\Omega-\lambda}{(\lambda-\Omega+1-2w)}; m = \lambda + \xi(\lambda - w); w = 1 - n = \frac{v}{t+v}$$

Since the proportions, w_1, Ω_1, λ_1 are known, it compels the value of ξ_1 , which is proportion of Blue Diagonal to Red Diagonal Ballots, that is $\xi_1 = \frac{t_1+v_1}{s_1+u_1}$, is now forced, and since $\alpha_1 = \frac{1}{1+\xi_1}$, then Gilbert's aggregate percentage share of the ballots in this ballot set is also compelled (Gilbert is the algorithmically intended loser).

Since ξ_1, w_1, λ_1 are known, it forces the value of m_1 , which is the percentage of s_1 ballots amongst s_1 and u_1 and tells us proportion of s_1 to u_1 ballots via the identity: $\frac{s_1}{u_1} = \frac{m_2}{1-m_2}$. Since the value of t_1 is known (the input square), the values of s_2, u_2 and v_2 are also known, as the pairwise proportions betwixt them have all been forced.

The illegal trivariate cubic equation is as follows, with an $R^2 = 0.9988018849$ (video on next is the 4D surface that the Clark County precincts rest upon when their Ω, λ, w values are plotted in x, y, z space respectively, with Ψ acting as the fourth dimension) The residual values have a left-tailed Poisson distribution, and the residual errors come from, and only from, whether or not they rounded the illegally calculated vote totals up or down to the nearest integer.

$$w = \sum_{k=0}^{k=3} \left(\sum_{j=0}^{j=k} \left(\sum_{t=0}^{t=k-j} \left((z_{k,j,((k-j)-t)}) (\Psi^{(k-j)-t}) (\Omega^t) (\lambda^j) \right) \right) \right); z_{k,j,t} \in \mathbb{R}$$

$z_{0,0,0}$	$z_{1,0,0}$	$z_{1,0,1}$	$z_{1,1,0}$		
1.23432200675597	-12.7924428834813	-4.52074189309496	0.86645936279092		
$z_{2,0,0}$	$z_{2,0,1}$	$z_{2,0,2}$	$z_{2,1,0}$	$z_{2,1,1}$	$z_{2,2,0}$
-8.25612835213541	14.8922383673489	5.72812721610535	36.574964039959	2.89158378064167	-2.85296044650022
$z_{3,0,0}$	$z_{3,0,1}$	$z_{3,0,2}$	$z_{3,0,3}$		
605.670185368042	37.1523531624116	-8.5639772178256	-2.43329977143731		
$z_{3,1,0}$	$z_{3,1,1}$	$z_{3,1,2}$	$z_{3,2,0}$	$z_{3,2,1}$	$z_{3,3,0}$
-100.901214897166	-25.1093777001369	-3.38150119705824	-14.9393149687676	1.30270575103349	1.67597666609799

Preface Equation 0.3.2; The Bivariate Real Number Quadratic Mail-in Manifold, Governor

Let Candidate A be Gilbert; let Candidate B be Sisolak; let Candidate C be Lombardo.

Let A_1, A_2, A_3 be Gilbert's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let B_1, B_2, B_3 be Sisolak's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let C_1, C_2, C_3 be Lombardo's Early Vote, Mail-in Vote and Election Day Vote respectively.

Let $s_2 = B_2$

Let $t_2 = (A_1 + C_3) + A_2$; A_2 is the output; A_1, C_3 were already illegally calculated.

Let $u_2 = (B_1 + B_3)$, this is the input square, B_1, B_3 were already illegally calculated.

Let $v_2 = (C_1 + A_3) + C_2$; C_2 is the output; C_1, A_3 were already illegally calculated.

Let R be the number of registered voters at the precinct.

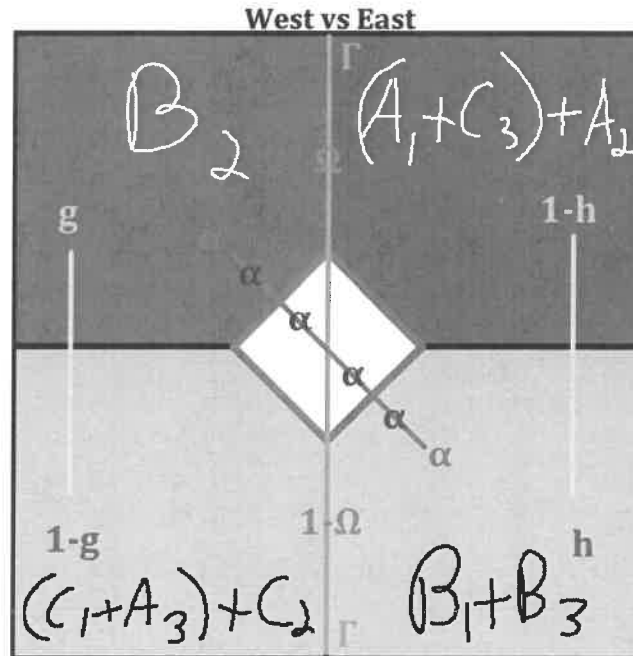
$$g_2 = \frac{s_2}{s_2+v_2}, h_2 = \frac{u_2}{u_2+t_2}, \alpha_2 = \frac{s_2+u_2}{(s_2+u_2)+(t_2+v_2)}, \Omega_2 = \frac{s_2+t_2}{(s_2+t_2)+(u_2+v_2)}, \lambda_2 = \frac{s_2+v_2}{(s_2+v_2)+(u_2+v_2)}$$

$$\Gamma_2 = \frac{u_2+t_2}{s_2+v_2} = \frac{1-\lambda_2}{\lambda_2}, \quad w_2 = (1 - h_2) = \frac{t_2}{u_2+t_2};$$

In a fair election:

$$g = \alpha + \Gamma^{-1}(\alpha - h) = \frac{\Omega - \alpha m}{1 - \alpha} = \frac{(\xi+1)(\Omega - \lambda) + \xi}{2\xi}; \quad w = \Omega + \Gamma(\Omega - g) = \frac{(\Gamma+1)(\Omega - \alpha) + \Gamma}{2\Gamma}$$

In the above sequence of equalities, three of the five proportions must always be known to resolve g_1 , however, in Clark County we obtain the illegal cubic manifold equations that yields g_1 with h_1 and α_1 without either Γ_1 nor Ω_1 .



The bivariate quadratic equation will have g isolated on the right-hand side. In the diagram on the previous page, g is the West Side Percentage, that is the percentage share of ballots that belong to s amongst s and v , $g = \frac{s}{s+v}$.

Once g is illegally resolved from the quadratic surface of h, α , both Γ and Ω are compelled into existence, since in any election, fair or unfair:

$$g = \alpha + \Gamma^{-1}(\alpha - h) \Rightarrow \Gamma = \frac{g-\alpha}{\alpha-h}; \quad g = \Omega + \Gamma^{-1}(\Omega - w) \Rightarrow \Omega = \frac{g+\Gamma w}{\Gamma+1} = \frac{g+\Gamma(1-h)}{\Gamma+1}$$

Since h_2 is known, and u_2 is the input square, then $t_2 = \frac{h}{1-h}(u_2)$ and is therefore known. Thus A_2 , which is Gilbert's Mail-in Vote, is known known via the subtraction: $A_2 = v_2 - (A_1 + C_3)$.

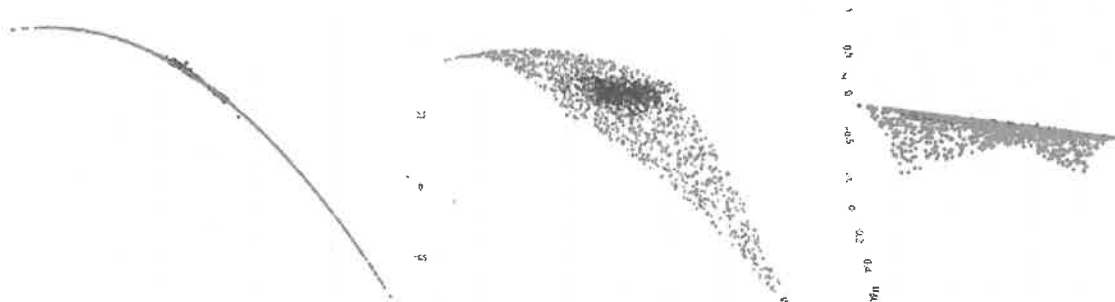
Since the proportions, g_2, h_2, α_2 are known, it forces the value of Γ_2 , which is proportion of East Side Ballots to West Side Ballots, that is $\Gamma_2 = \frac{u_2+t_2}{s_2+v_2}$, which means we also know $\Gamma_2^{-1} = \frac{s_2+v_2}{u_2+t_2}$, which is the proportion of West Side to East Side ballots, thus $(B_2) + ((C_1 + A_3) + C_2) = s_2 + v_2 = \Gamma_2^{-1}(u_2 + v_2)$. Knowing the value of g_2 allows us to split this the sum of s_2 and v_2 , that is: $B_2 = s_2 = g_2(s_2 + v_2)$, which is Sisolak's Mail-in Vote; $t_2 = (1 - g_2)(s_2 + v_2)$; $C_2 = t_2 - (C_1 + A_3)$, which is Lombardo's Mail-in Vote.

The illegal bivariate quadratic equation is as follows, with an $R^2 = 0.9988816647$

$$g_2 = k_0 + k_1\alpha_2 + k_2h_2 + k_3\alpha_2^2 + k_4h_2\alpha_2 + k_5h_2^2$$

k_0	k_1	k_2	k_3	k_4	k_5
0.005070874159	1.535448595	-0.549045972	-0.6614892743	1.303368815	-0.632192474

The below image is the 3D curved manifold (red) upon which the precincts (blue) lay upon.

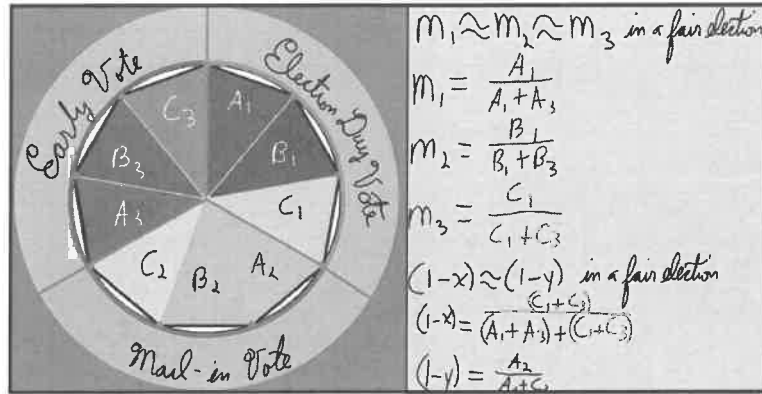


As to why the Neural Network chose to invoke the same Trivariate Turnout Manifold as the Senate race in the first of the equations, yet opted to follow up with quadratic of $g = f(h, \alpha)$ instead of $g = f(\alpha, \Omega)$ shall most likely remain as mysterious as the thought processes which incited the Neural Network, Leela Zero, to execute her Immortal Queen Sacrifice against Stockfish.

<https://youtu.be/AXbT0UcQPf8>

Leela Chess Zero's Immortal Queen Sacrifice
https://tcec-chess.com/articles/Sufi_18_-_Sadler.pdf

TCEC Season 18 Superfinal round 65



Preface Restoration Algorithm 0.2.3: Restoring the Governor's Race

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https://docs.google.com/spreadsheets/d/11NL0yjh-Cr9FxQj4d_RYCuBiIJM0h7Ov4F5YGrVBbM4/edit?usp=sharing

Since we have the advantage of the restored Sheriff's Race, the restoration of the Governor's race is far easier, as we can import the ratio of Early to Mail-in to Election Day ballots in each precinct.

Since the second manifold equations informs us that all mail-in totals, A_2, B_2, C_2 , are illegitimate outputs, we first act to restore the Early and Election Day Totals, and as there is no correlation between Lombardo's and Gilbert's Election Day, Early and Mail-in Percentages, we first restore the relationship between Lombardo and Sisolak, since they are correlated, and we know Lombardo's Early and Election Day ratio to not only be preserved, but also identical to Hyt's Early to Election Day ratio in the Sheriff's race.

Is it not surprising that the three candidates, from different races, whose Early to Election Day Ratios were preserved as inputs into their respective manifolds, have nearly identical values (Hyt, Laxalt and Lombardo).

Let $x_{1,i} = \frac{C_1}{C_1+B_1}$ be Lombardo's Early Vote Percentage amongst Lombardo and Sisolak in each precinct.

Let $y_{1,i} = \frac{A_3}{A_3+B_3}$ be Lombardo's Election Day Percentage amongst Lombardo and Sisolak in each precinct.

Let $\overline{y_{1,i}} = k_0 + k_1(x_{1,i}) + k_2(x_{1,i})^2 + k_3(x_{1,i})^3$ be the cubic regression of $y_{1,i}$.

For Clark County: $k_0 = 0.115$; $k_1 = 1.1$; $k_2 = -0.238$; $k_3 = -0.164$

Let $u_{0,i} = x_{1,i}$; $v_{0,i} = \overline{y_{1,i}} - k_0$, this removes the intercept advantage for Sisolak.

Let $r_{0,i} = y_{1,i} - \overline{y_{1,i}}$, this restores the residual value.

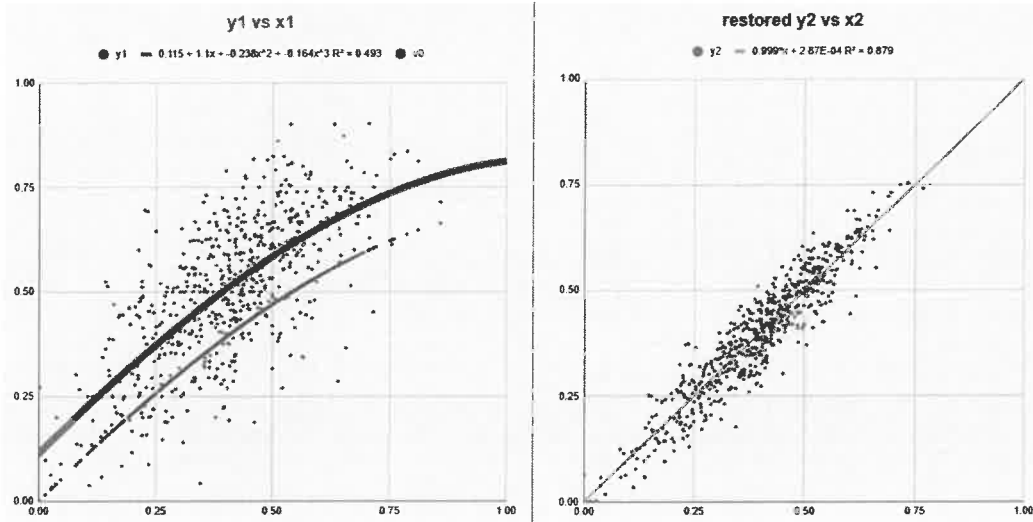
Let σ be the standard deviation of all $r_{0,i}$. If $\theta > 5\%$, then scale all residuals uniformly by $\frac{5\%}{\sigma}$.

Set $\theta_i = \frac{\pi}{4} - \text{ARCTAN}\left(\frac{v_{0,i}}{u_{0,i}}\right)$ for all precincts.

Set $u_{1,i} = u_{0,i} \cos\theta_i - v_{0,i} \sin\theta_i$; $v_{1,i} = u_{0,i} \sin\theta_i + v_{0,i} \cos\theta_i$. This smashes the cubic into the $y = x$ line, while preserving the magnitude of the hijacked vector.

We now set $(x_{2,i}, y_{2,i}) = (u_{1,i}, v_{1,i})$. If either coordinate is above or below 0% to 100%, then we reset to 0 to 1 respectively. These are the restored percentages.

Below is the graph of the original Early Vote Percentage (horizontal axis) vs the original Election Day Percentage (vertical axis) on the left side, the restored percentages on the right side after the algorithm on the above page is executed.



Now we set $d_i = C_1 + B_1$, the total number of Early Ballots for Lombardo and Sisolak in each precinct.

Now we set $f_i = C_3 + B_3$, the total number of Election Day Ballots for Lombardo and Sisolak in each precinct.

Let $s_i = (x_{2,i})(d_i)$ be Lombardo's Intercessory Early Vote in each precinct.

Let $t_i = d_i - s_i$ be Sisolak's Intercessory Early Vote in each precinct.

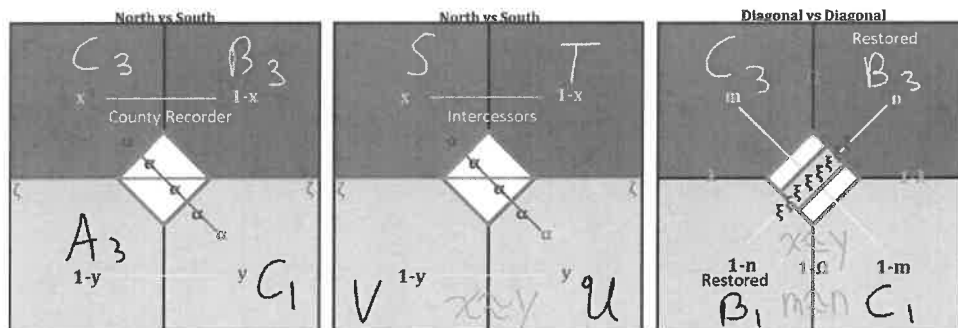
Let $u_i = (y_{2,i})(f_i)$ be Lombardo's Intercessory Election Day Vote in each precinct

Let $v_i = f_i - u_i$ be Sisolak's Intercessory Election Day Vote in each precinct

Let $Z_{1,i} = \frac{C_3}{s_i}$ be the North Side Scale in each precinct.

Let $Z_{2,i} = \frac{C_1}{u_i}$ be the South Side Scale in each precinct.

Let $C_{1,2,i} = z_{1,i}(s_i); B_{1,2,i} = z_{1,i}(t_i); C_{3,2,i} = z_{2,i}(u_i); B_{3,2,i} = z_{2,i}(v_i)$, each rounded to the nearest integer, be the restored Early and Election Day totals of Lombardo and Sisolak.



Seeing that Lombardo's $C_1 : C_3$ ratio is nearly identical to Hyt's $A_1 : A_3$ and Robert's $C_1 : C_3$ ratios in the Sheriff's Primary, and that Sisolak's $B_1 : B_3$ ratio also matches, we know that is safe to import Robert's $C_2 : (C_1 + C_3)$ ratio from the Sheriff's Primary to yield Lombardo's and Sisolak's Mail-in totals in the Senate race.

Recall that $n_{3,2,i} = \frac{c_2}{c_2 + (c_1 + c_3)}$ is Robert's Mail-in to combined Early+EDV total in the Sheriff's race.

Let $C_{2,2,i} = \left(\frac{n_{3,2,i}}{1 - n_{3,2,i}} \right) (C_{1,2,i} + C_{3,2,i})$, which is the product of Robert's n percentage with the sum of Lombardo's Early and Election Day Vote, be Lombardo's restored Mail-in Vote.

Let $B_{2,2,i} = \left(\frac{n_{3,2,i}}{1 - n_{3,2,i}} \right) (B_{1,2,i} + B_{3,2,i})$, which is the product of Robert's n percentage with the sum of Sisolak's Early and Election Day Vote, be Sisolak's restored Mail-in Vote.

We now have the restored totals for Lombardo and Sisolak, in all modes of voting. We now proceed to restore Gilbert's totals.

Let $q_{1,i} = \frac{C_{1,2,i}}{C_{1,2,i} + C_{3,2,i}}$; $q_{2,i} = \frac{B_{1,2,i}}{B_{1,2,i} + B_{3,2,i}}$ be Lombardo's and Sisolak's Early to EDV ratio in each precinct.

Since $q_{1,i} \approx q_{2,i}$ across the precincts, let $q_{3,i} = \frac{1}{2}(q_{1,i} + q_{2,i})$ be Gilbert's Early to EDV ratio in each precinct.

Let $w_i = A_{1,0,i} + A_{3,0,i}$ be the sum of the County Recorder totals for Gilbert's Early and EDV ballots.

Let $A_{1,1,i} = (q_{3,i})(w_i)$ be Gilbert's Intercessory Early Vote, rounded to the nearest integer.

Let $A_{3,1,i} = w_i - A_{1,1,i}$ be Gilbert's Intercessory Early Vote.

Let $A_{2,1,i} = \left(\frac{n_{3,2,i}}{1 - n_{3,2,i}} \right) (w_i)$, which is the product of Robert's n percentage with the sum of Gilbert's Early and Election Day Vote, be Gilbert's intercessory Mail-in Vote.

Although we've restored the proportions of $A_1 : A_2 : A_3$, we do not yet know the proportion of the sum of all of Lombardo's and Sisolak's ballots to Gilbert's. Thankfully, the solution to this is rather easy.

Let Λ_i be the total sum of ballots cast in each precinct in the county recorder data for Lombardo, Sisolak and Gilbert.

Let ρ_i be the total sum of restored ballots for Lombardo and Sisolak.

Let $\Delta_i = \Lambda_i - \rho_i$, be the difference of Lombardo's and Sisolak's restored totals from the Total Ballots Cast.

Let ω_i be the total sum of county recorder ballots for Gilbert.

Let $Z_{3,i} = \frac{\Delta_i}{\omega_i}$ be the Great Scale in each precinct.

Let $A_{1,2,i} = z_{3,i}(A_{1,1,i})$; $A_{2,2,i} = z_{3,i}(A_{2,1,i})$; $A_{3,2,i} = z_{3,i}(A_{3,1,i})$ be the restored values of Gilbert's Early, Mail-in and Election Day Totals in each precinct.

In Columns O:Y on the *Original Data* sheet, the restored values can be found: 📄 2022, Senate Restoration, Clark County, Nevada
https://docs.google.com/spreadsheets/d/1cXM7j9T-Pp_6pEWBCABC1fR5EE8dt92RcqipHofjs0/edit?usp=sharing

Results	Gilbert Early	Gilbert Mail	Gilbert EDV	Sisolak Early	Sisolak Mail	Sisolak EDV	Lombardo Early	Lombardo Mail	Lombardo EDV
Original	8802	7652	11850	22048	70327	13441	16420	24238	15203
Restored	32780	21489	29543	22516	17591	21995	16412	12489	15182

Results	Gilbert	Sisolak	Lombardo	Republican	Democrat	Republican %	Early%	MiV%	EDV%
Original Total	28304	105816	55861	84165	105816	44.30%	24.88%	53.80%	21.31%
Restored Total	83812	62102	44083	127895	62102	67.31%	37.74%	27.14%	35.12%

Results	Gilbert	Sisolak	Lombardo	Gilbert Margin
Original Total	28304	105816	55861	-27557
Restored Total	83812	62102	44083	39729

Although the action of the manifolds to upset the winner of the election is always a sad sight, what is most striking about this restoration is that percentage of Republican ballots cast increased from 50.38%, which is a 1:1 ratio of Democrats to Republicans, to 75.06%, which is a 3:1 ratio of Republicans to Democrats, and demonstrates that such a massive change was indeed possible in the 2020 General Election.

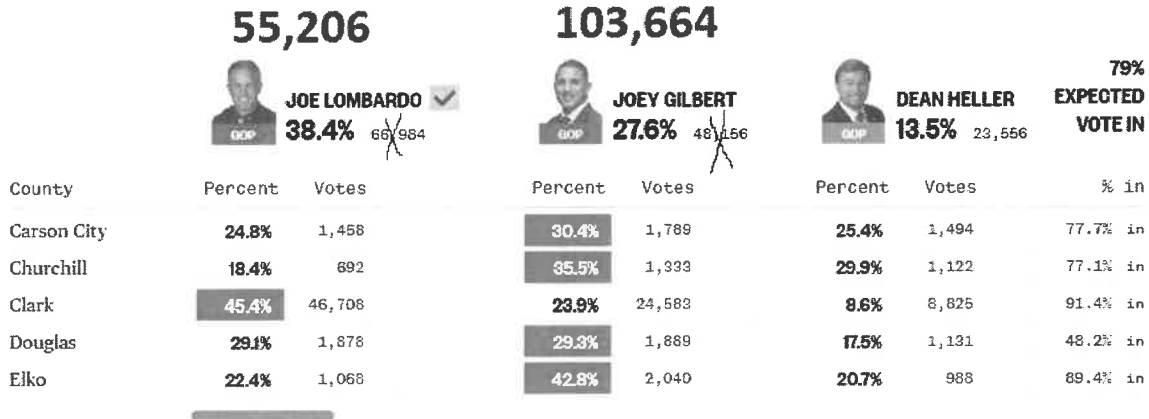


EXHIBIT B

EXHIBIT B

Dr. Oliver A. Hemmers

281 Gingerbread Street
Henderson, NV 89012

Phone: (702) 525-8767 Email: Oliver.Hemmers@gmail.com

July 02, 2022

Craig A. Mueller, Esq.
Mueller and Associates
808 South Seventh Street
Las Vegas, Nevada 89101

Re: Request for an expert opinion on the 'Clark County, 2022, Governor Primary Precinct Analysis' Summary

Dear Mr. Mueller:

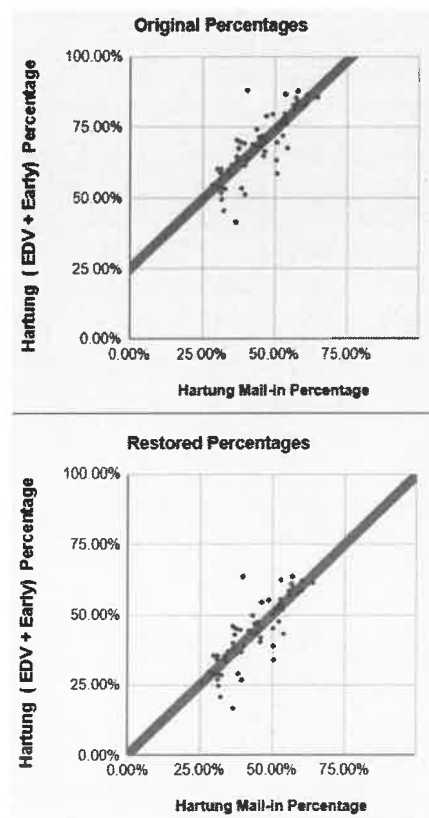
I was initially contacted on June 30, 2022 and was requested to provide my expert opinion as a mathematically trained physicist on the Summary of a report on the Clark County, 2022, Governor Primary Precinct Analysis.

My educational background is in quantum physics, specifically atomic and molecular physics, and I received a PhD in that field from the Institute for Radiation and Nuclear Physics at the Technical University in Berlin, Germany (1993). I worked in my area of research for 27 years and designed/built unique elementary particle analyzers and containment vessels capable of spectroscopically analyzing gaseous, liquid and solid samples for photo absorption, electron and ion emissions including partial-differential cross sections within high-vacuum experimental chambers. The required data analysis involved statistical particle distribution and regression analysis, and mathematical data interpretation techniques to discern real physics-based data from experimental artifacts, fake signals, and electronic interferences.

Opinion on the Summary Report titled 'Clark County, 2022, Governor Primary Precinct Analysis'

- 1) The paper under review [1] claims that a mathematical analysis can determine the difference between a fair and an unfair election, and where the unfair election is an election for which the results are predetermined algorithmically. It is assumed that causality is a valid assumption during an election where the effect cannot precede the cause, more specific that knowing the aggregate percentage of votes for a candidate cannot precede the election day and mail-in percentages. This might seem to be a trivial assumption, but it lies at the very core of the analysis.
- 2) In the preface, two examples are presented for a bivariate analysis [2] related to election results. A bivariate (Two-Variables) is described as follows [2]: The analysis of two specific variables to determine the empirical relationship present between them is referred to as bivariate analysis and it is considered to be one of the simplest forms of quantitative analysis. It is of utmost help when it comes to testing simple hypotheses of association and determining the extent to which it becomes easier to predict the value of one particular variable, given the value of the other variable is already known. There are three main types of bivariate analysis:
 - a. **Scatter Plots:** It makes use of dots to represent the values for two different numeric variables. In other words, it provides us with a visual idea of what pattern the variables are following.

- b. **Regression Analysis:** This involves a wide range of tools that can be utilized to determine just how the data points might be related. It tends to provide us with an equation for the curve/line along with giving us the correlation coefficient.
 - c. **Correlation Coefficients:** This shows how one particular variable moves about with relation to another.
- 3) In certain cases of bivariate data, one variable is said to determine or influence the other one. These two types of variables are distinguished as independent and dependent variables. The former refers to a situation wherein neither of the variables is considered to be dependent on each other.[2]
A simple example is the relationship that exists between teenagers reading (independent variable) and their scores in English (dependent variable). **Cause -> Effect**
 - 4) The paper specifically uses the bivariate real number plane formula and the West vs. East paradigm to calculate the results as shown in [3,4].
 - 5) The Preface concludes with a brief explanation how the election results were successfully restored for the 2020 Election of Hartung vs. Baker [4]. The data and calculations are shown in [4]. The data can be shown in form of two graphs, one is the original data (top), and one is the restored data (bottom).

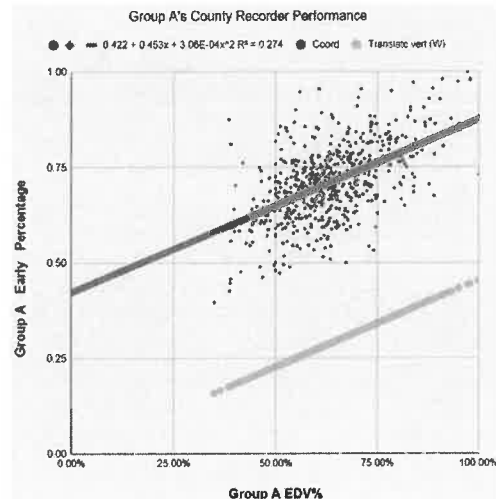
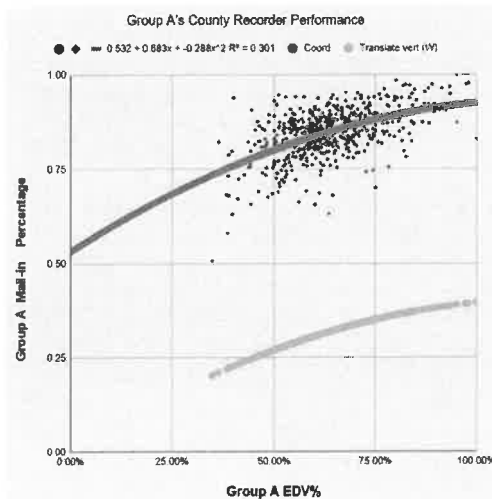


The blue dots represent the results of the individual election precincts, and the red curve is a polynomial (quartic) fit through the blue data cluster. The fact that in the top graph the red line does not end at 0%/0% as shown in the bottom graph, means that there is a problem with the election results. In a fair election, the sum of the Early Day and Election Day votes should produce very similar results to the Mail-in votes when the regression analysis has a high confidence (usually called R^2), meaning the x-values and the y-values should be similar (when x is 10% then y should be close to 10% as well) and not off by 25%.

- a) Even when Hartung received 0% of the Mail-in votes, he would “magically” receive 25% of the combined Election Day and Early Votes. This is impossible. Also, should Hartung receive 100%

of the Election Day and Early Votes then Baker would “magically” receive 25% of the Mail-in votes (100% minus his 75% =25%). Again, this is not possible in a fair election.

- b) Even though this discrepancy is not proof of fraud nor an explanation of what type of fraud rigged the election, it is still possible to correct the numbers and restore the true values, as if there was a fair election. The result is shown in the bottom picture and the calculated values can be found in [4].
 - c) This method of the applied Election Restoration Algorithm has been successfully used over the past two years not only on Hartung vs. Baker but also for Maricopa, Philadelphia, Atlanta, Dallas and Tarrant, Macomb and Oakland, as well as the last federal election.
- 6) The same methods [5] that have been honed and applied to various elections over the past two years, have been applied to the Group B vs Group A candidates in the 2022 Gubernatorial Primary [6].



- a. As an example, the Group A data is shown in the two figures above. The blue dots are from [6], the red curve is a polynomial fit through the blue dots and the pink line is an extrapolation of the polynomial fit using the shown equation in the graph. Both have the Election Day vote percentages on the x-axis. As for the y-axis, the left graph has the Mail-in percentages and the right graph the Early vote percentages. It can be seen that the y-intercepts and the polynomial spines between the two graphs are quite different. Reference [1] shows the restored positions of Group A’s Election Day percentage which are virtually the same in both graphs [1].
- b. In order to be able to restore the original data it is important to identify what part of the data is authentic in order to make the corrections to the illegal data. As written in [1], for the illegal equations that govern the percentages of ballots cast between Group B vs Group A, the input percentage is h (as shown on page 3 in [1]), which is equal to Group B’s Mail-in vote divided by Group A’s combined Early and Election Day votes. From that we know that Group A’s Mail-in vote and Group A’s Early and Election Day votes are authentic.
- c. Therefore, you can restore Group A’s and Group B’s totals and then multiply the individual vote totals of each candidate in each group by the net proportions of change between collectives of Group A and B in each precinct.

Summary

- 1) Reference [1] and the included references therein describe how using a restoration algorithm that is based on the well-established mathematical Bivariate Analysis [2] in particular the Bivariate Real Number Plane Formula [5], which has been applied numerous times over the past two years for many US county elections can also be applied to the recent 2022 Gubernatorial Primary in Nevada.

- 2) For the mathematical restoration of the original data, it is not necessary to claim fraud nor to know any specifics of the fraud.
- 3) The applied restoration of the official election results shows a significant difference between original and restored election data for all candidates reviewed.

Professional Opinion and Basis of these Opinion

It is my professional opinion that the reviewed paper [1] including the references therein is based on established statistics and statistical analyses and correct in its described methods that have been applied numerous times over the past two years. It is also evident that a restoration of the 2022 Gubernatorial Primary election data is necessary in order to correct for obvious major flaws in the original data. This restoration will affect all candidates' election results significantly.

Information considered in Formulating the Above Opinions

1. "Clark County, 2022, Governor Primary Precinct Analysis; Summary".
2. [Bivariate Analysis - Types and Examples \(vedantu.com\)](#)
3. [Restored Nevada 2022 Primary Elections - Google Sheets](#)
4. [Restored Washoe Elections - Google Sheets](#)
5. [Clark and Washoe Precinct Analysis - Google Docs](#)
6. [Clark County, NV \(clarkcountynv.gov\)](#)

Attachments

Curriculum Vitae of Dr. Oliver Hemmers

Compensation

My fee schedule is \$200.00 per hour plus expenses. To review all materials to date and prepare this report, I have spent 11 hours. I have not been compensated, yet.

Should you require clarification of any of the material contained herein, please do not hesitate to contact me.

Thank you for the opportunity to assist you in this matter.

Sincerely,

Dr. Oliver A. Hemmers

- 2) For the mathematical restoration of the original data, it is not necessary to claim fraud nor to know any specifics of the fraud.
- 3) The applied restoration of the official election results shows a significant difference between original and restored election data for all candidates reviewed.

Professional Opinion and Basis of these Opinion

It is my professional opinion that the reviewed paper [1] including the references therein is based on established statistics and statistical analyses and correct in its described methods that have been applied numerous times over the past two years. It is also evident that a restoration of the 2022 Gubernatorial Primary election data is necessary in order to correct for obvious major flaws in the original data. This restoration will affect all candidates' election results significantly.

Information considered in Formulating the Above Opinions

1. "Clark County, 2022, Governor Primary Precinct Analysis; Summary".
2. [Bivariate Analysis - Types and Examples \(vedantu.com\)](https://www.vedantu.com)
3. [Restored Nevada 2022 Primary Elections - Google Sheets](#)
4. [Restored Washoe Elections - Google Sheets](#)
5. [Clark and Washoe Precinct Analysis - Google Docs](#)
6. [Clark County, NV \(clarkcountynv.gov\)](https://clarkcountynv.gov)

Attachments

Curriculum Vitae of Dr. Oliver Hemmers

Compensation

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Should you require clarification of any of the material contained herein, please do not hesitate to contact me.

Thank you for the opportunity to assist you in this matter.

Sincerely,



Dr. Oliver A. Hemmers

EXHIBIT C

EXHIBIT C

Curriculum Vitae Dr. Oliver A. Hemmers

Education, Research, and Leadership Experience

1. Education

Dr. (rerum naturalium) in Physics, "Correlation Effects in small Molecules", Technische Universität Berlin, Germany, 1993, Advisor: Professor Dr. Uwe E. Becker – Magna Cum Laude

Diplom (M. Sci.) in Physics, "Studies of Correlation Effects in Molecules with Synchrotron Radiation", Technische Universität Berlin, Germany, 1988, Advisor: Professor Dr. Uwe E. Becker

2. Non-Academic Positions

2020 – Present	Founder and Owner of Infinity Health Solutions – Consulting and Broker Services
2015 – 2021	Vice President for Operations at Infinity Capital Management – Health Care Finance
2015 – Present	President of Skybot Challenge a 501(c)3 non-Profit for STEM Education
2014 – 2020	Advisor to the Trans Global Business and Conventions Agency
2002 – Present	Co-Founder and Director at GPmicro, a Cloud Backup Company
2001 – 2021	Director, Member of the Board, Infinity Capital Management
2012 – 2016	Chairman of the Board for the Nevada Alliance for Defence, Energy, and Business
2010 – 2013	Advisory Board Member, Longenecker and Associates, Inc.
2009 – 2012	Scientific Advisory Board Member and Reviewer, Nevada Institute for Renewable Energy Commercialization (NIREC)
2009 – 2012	Member of the Green Technology Committee of the Nevada Development Authority
2002 – 2012	Co-founder, Director, and Member of the Board, Gruintine Pueche, Inc.

3. Academic and Administrative Positions

2014 – 2016	PhD Thesis Advisory Committee Member
2013 – 2014	Research Project Director for the Vice President for Research, UNLV
2011 – 2014	Director of the UNLV Initiative for High-Energy X-Ray Applications (HEXA)
2011 – 2014	Associate Director of the Nevada System of Higher Education EPSCoR Program
2011 – 2014	DOE EPSCoR Project Director for the State of Nevada
2008 – 2013	Executive Director, Harry Reid Center for Environmental Studies, UNLV
2009 – 2011	Acting Director, Marjorie Barrick Museum, UNLV
2009 – 2010	Executive Director, Transportation Research Center, UNLV
2006 – 2009	Director, Office of Strategic Energy Programs, UNLV
2009 – 2014	Research Professor, UNLV
2006 – 2009	Associate Research Professor, Department of Chemistry, UNLV
1998 – 2006	Assistant Research Professor, Department of Chemistry, UNLV
1994 – 1998	Postdoctoral Fellow, Department of Chemistry, UNLV
1993 – 1994	Postdoctoral Fellow at the Surface Science Division, Fritz-Haber-Institute of the Max-Planck Society in Berlin, Germany
1988 – 1993	Research Assistant, Department of Physics, Technical University Berlin, Germany

4. Academic Service

2013 – 2014	Accelerator Facility Radiation Safety Committee
2012	Member of the Harry Reid Silver State Award Review Committee
2011 – 2014	Chair of the UNLV Accelerator Project Advisory Committee
2011 – 2013	Member (ex-officio) of the UNLV Research Council
2010 – 2012	Member of the UNLV Sustainability Council

2009 – 2013	Member on the Council on Centers, Institutes, Museums, and Laboratories
2008 – 2013	Member of the UNLV Academic Council
2008 – 2013	Member of the UNLV Deans' Council
2008 – 2013	Chair of the HRC Executive Committee

5. Research Activities & Interests

- Optimization of biodiesel/biofuel production processes
- Hydrogen fuel storage technologies
- Materials for Solar Power Production
- New materials under extreme conditions for energy research
- Physics of Climate Change
- Applications of soft x-ray spectroscopy using synchrotron radiation on gas-phase, solids and surfaces to probe electronic structures, correlations and processes.
- High-Energy X-Ray Applications for UNLV Accelerator Initiative
- Material science such as the synthesis and characterization of surrogate substituted fluorapatite for long-term nuclear waste storage

6. Research Management Experience

- Successfully completed the reconstruction of the UNLV facility that houses the UNLV Program for High-Energy X-Ray Applications (2010 – 2014) and installed and made operational the first Varian M6 Linatron accelerator (August 2014) for the user community. Planned efforts include development of nuclear materials transmutation research as well as radiography applications and radiation resistance studies related to cancer research and future space travel.
- Appointed as the NSHE lead in the State of Nevada effort to respond to the FAA SIR on establishing test sites within the US for to help to determine how to successfully integrate unmanned aerial vehicles/systems into the US air space (2012 to 2013). Appointed by Governor's Office of Economic Development (GOED) in June 2012 to head up FAA test site proposal development and writing effort and to coordinate with 30+ stakeholders the overall proposal structure and content in support of GOED. FAA awarded Nevada as one of 6 new US Test Sites on December 30, 2013.
- UNLV Lead to establish a Cyber security Initiative with Oak Ridge National Laboratory, Nevada National Security Site, University of Tennessee, Knoxville, Louisiana Tech University, and Mississippi State University to work on extreme cyber test beds such as major power grid infrastructure and other relevant cyber security issues (2011 to 2013).
- Managed as Executive Director the Harry Reid Center for Environmental Studies (HRC) at UNLV and developed research themes (Energy & Materials, Environment, Health, and Security) to further focus the HRC mission areas for better campus integration. In 2012, HRC had 68 active projects with a total funding volume of \$21M. Total personnel 67 professional/classified staff, 5 postdoctoral scholars, 28 graduate and 24 undergraduate students. In 2012 HRC outperformed the sum of all other research centers at UNLV by more than a factor of two and was only second to the College of Science in total research funding.
- Restructuring (Nov. 2008 to June 2010) the UNLV Harry Reid Center for Environmental Studies to better meet the demands of interdisciplinary research across campus and orchestrating campus-wide environmental and renewable energy related efforts including research, education and outreach
- Leading the restructuring of the Transportation Research Center (in 2010/11) that was moved from the College of Engineering (CoE) to the HRC and then successfully returned as one of the CoE strongest research unit.
- Leading the assessment and restructuring of the Barrick Museum, which lost all research activities due to State funding cuts and the transition of the defunct Museum into the College of Fine Arts to become a successful Museum for Fine Arts.
- UNLV managerial point of contact for the Nevada Renewable Energy Consortium and the state-wide Task Leader for Solar Energy Research projects within the Consortium from 2009 to 2012.

- Project manager and lead-PI on a DOE funded project (\$6.9 million) that focuses on the development of biodiesel using ionic transfer membranes involving over 20 researchers from UNLV and one external company.
- Principal Investigator on a DOE funded project on Hollow Glass Microspheres: Glasses and Nano-composites for Hydrogen Storage.
- State of Nevada Director for DOE EPSCoR Programs and Deputy Director for the Nevada EPSCoR Program.
- PI or co-PI on about \$12 million in research funding over the last 18 years with most of the funds being allocated to projects at UNLV.
- Supervised and co-mentored over 50 students, post-docs and research professors

7. Student and Postdoctoral Research Advisor

Total Undergraduate Students Advised and co-supervised: 23

Total Graduate Students Advised and co-supervised: 9

Total Postdoctoral Scholars Sponsored and co-supervised: 12

8. Research and Project Grants

Funded Research Grants (including Program Management) as PI or co-PI:

- Secured for UNLV a new Varian K-15 Linatron X-Ray accelerator, including a 5-year service contract with a total value of **\$2.8M**.
- UNLV Accelerator Facility renovation funded by UNLV **\$1.8M**, Equipment and services donated by Varian to date (June 2013) about **\$1M**.
- “Global Security Directorate Initiatives”, DOE (ORNL) (funding allocated, total **\$100k**), 1 year and 2 months project period, starting date 11/2012.
- “Development of Biofuels using Ionic Transfer Membranes III”, DOE (funded, total **\$1,875M**), 2-year project period, starting date 1/2011.
- “Efficient thermal management and temperature amplification for lunar based systems”, NASA (funded, total **\$750k**), 12 months project period, starting date 10/2010.
- “X-Ray Interactions with Molecules”, NSF (funded, total **\$440k**), 3 year project period, starting date 7/2010.
- “Hollow Glass Microspheres: Glasses and Nano-composites for Hydrogen Storage”, DOE (funded, total **\$654k**), starting date 1/2010.
- “Development of Biofuels using Ionic Transfer Membranes II”, DOE (funded, total **\$1,28M**), 18 months project period, starting date 7/2009.
- Applied Research Initiative (ARI) match funds for “Development of Biofuels using Ionic Transfer Membranes” State of Nevada General Fund (funded, total **\$221k**), starting date 11/2006.
- “Hydrogen Fuel Cells and Storage Technology – Task 11”, DOE (funded, total **\$200k**), 2nd year, starting date 9/2006.
- “Development of Biofuels using Ionic Transfer Membranes”, DOE (funded, total **\$3,7M**), starting date 7/2006.
- “X-Ray Atomic and Molecular Spectroscopy: Probing Fundamental Interactions between X-Rays and Matter”, NSF (funded, total **\$450k**), 3-year project period, starting date 7/2006.
- “Material and Environmental Science with X-Rays”, PNNL (funded, total **\$83k**), 11 months, starting date 10/2005.
- “Hydrogen Fuel Cells and Storage Technology – Task 11”, DOE (funded, total **\$200k**), 1st year, starting date 9/2005.
- “X-Ray Atomic and Molecular Spectroscopy: Probing Fundamental Interactions between X-Rays and Matter”, NSF (funded, total **\$45k**), 1-year project period, starting date 7/2005.
- “Material and Environmental Science with X-Rays”, PNNL and LBNL, (funded, total **\$17k**), 4 months, starting date 6/2005.
- “Material and Environmental Science with X-Rays”, EUV Technology, Inc., (funded, total **\$10k**), 2 months, starting date 11/2004.

- X-Ray Laser Photoelectron Spectroscopy”, LLNL, (funded, total **\$32.5k**), 2 years, starting date 5/2003.
- “Material and Environmental Science with X-Rays”, Univ. Of Alberta, CA, (funded, total **\$51k**), 3-year project period, starting date 7/2002.
- “X-Ray Atomic and Molecular Spectroscopy: Probing Fundamental Interactions between X-Rays and Matter”, NSF (funded, total **\$425k**), 3-year project period, starting date 7/2002.
- “Evaluation of Fluorapatite as a Waste-Form Material”, UNLV Transmutation Research Program, Task 16, Advanced Fuel Cycle Initiative, DOE (funded, total **\$476k**), 3-year project period, starting date 8/2002.
- Post-doctoral support to work at the Department of Chemistry, UNLV, German Research Society (DFG), funded **\$60k** for 18 months, 5/95 – 4/96 and 10/96 – 9/97.

9. Research Accomplishments

- 100 publications most of them peer-reviewed
- 200 presentations at national and international scientific conferences/meetings
- 18 invited talks at national and international scientific conferences/meetings and institutions
- 21 public speaking engagements, one book, two patents

10. Patents

Patent # 7,047,377 “FLEXIBLE REMOTE DATA TRANSFER AND DATA SYNCHRONIZATION”, May 16, 2006.

Patent # 8,663,429 “HOLLOW GLASS MICROSPHERE CANDIDATES FOR REVERSIBLE HYDROGEN STORAGE, PARTICULARLY FOR VEHICULAR APPLICATIONS”, March 4, 2014.

11. Research Education and Lead

Research Professors

Research Professor Dr. Craig Palmer (2008 – 2013) – supervisor
 Research Professor Dr. Denis Beller (2008 – 2013) – supervisor
 Research Professor Dr. David Stahl (2010 – 2012) – supervisor
 Assoc. Research Professor Dr. K.E. Lipinska (2006 – 2013) – supervisor
 Assoc. Research Professor Dr. Jian Ma (2008 – 2013) – supervisor
 Assoc. Research Professor Dr. Thomas Hartmann (2008 – 2013) – supervisor
 Assoc. Research Professor Dr. Anthony Hechanova (2008 – 2010) – supervisor
 Assoc. Research Professor Dr. Wayne Stolte (2008 – 2014) – co-supervisor
 Assist. Research Professor Dr. Allen Johnson (2008 – 2012) – supervisor

Post-Doctoral Scholars

Dr. David Gardenghi (6/2012 – 2014) – co-supervisor
 Dr. Jason Young (10/2007 – 6/2008) – co-supervisor
 Dr. Iraidia Demchenko (7/2007- 9/2011) – supervisor
 Dr. Anna Wolska (7/2002 – 6/2005) – co-supervisor
 Dr. Björn Zimmermann (7/2002 – 6/2004) – co-supervisor
 Dr. Renaud Guillemin (12/2000 – 8/2005) – co-supervisor
 Dr. Sung-Woo Yu (5/2000 – 3/2004) – co-supervisor
 Dr. Ponnusamy Nachimuthu (5/2000 – 9/2006) – co-supervisor
 Dr. Gunnar Öhrwall (9/1999 – 7/2001) – co-supervisor
 Dr. Marcelo Sant’Anna (4/1999 – 1/2001) – co-supervisor
 Dr. Ivan Dominguez-Lopez (1/1999 – 12/1999) – co-supervisor
 Dr. David Hansen (6/1998 – 2/1999) – co-supervisor

Graduate Students

Jason Thompson (2013 – 2014) – supervisor
 Kyle Bowen (2011 – 2016) – co-supervisor
 Patricia Kalita (2010 – 2014) – co-supervisor
 Amanda Hudson (1/2002 –9/2007) PhD, M.S. in Chemistry 12/2003 – co-supervisor
 Lan Dang (1/1998 – 12/2006) M.S. in Chemistry 7/2001 – co-supervisor
 Cong-Ich Tran (1/2001 – 1/2007) M.S. in Chemistry 8/2003 – co-supervisor
 G.W. Chinthaka Silva (1/2002 – 8/2005) M.S. in Chemistry – co-supervisor
 Chirantha P. Rodrigo (8/2002 – 5/2005) M.S. in Chemistry – co-supervisor
 Ina P. Bashta (1/2002 –5/2004) B.S. in Chemistry – co-supervisor

Undergraduate Students

Robert Gray (2013 – 2014) – supervisor
 Anna Childs (2011 – 2013) – co-supervisor
 Kyle Bowen (2007 – 2011) – co-supervisor
 Ranjay Kaushal (2005, 2007) – supervisor
 Satpreet Singh (2005) – supervisor
 Dyane Hill (2005) – supervisor
 Joe Baker (2002 – 03) – co-supervisor
 Felice Ferri (2001 – 03) – co-supervisor
 Monica Pangilinan (2001) – co-supervisor
 Sierra Laidman (2001) – co-supervisor
 Inna Bashta (2000-02) – co-supervisor
 Jennifer Overberg (2000 – 01) – co-supervisor
 Maraya Lotrakul (1999 – 02) – co-supervisor
 Melanie Blackburn (1999) – co-supervisor
 Tara Goddard (1999) – co-supervisor
 Colin Cunliff (1999) – co-supervisor
 Jason Fong (1996 – 2000) – co-supervisor
 Scott Oblad (1996) – co-supervisor
 Brett Vanderford (1996) – co-supervisor
 Ryan Martin (1996) – co-supervisor
 Jeanette Daniels (1995) – co-supervisor
 Greg Fisher (1994 – 95) – co-supervisor
 Tammy Nguyen (1994) – co-supervisor

12. Research Collaborations

Amusia, M. Ya.	Hebrew University of Jerusalem, Jerusalem, Israel
Arce, J.C.	Departamento de Quimica, Universidad del Valle, A. A. 25360 Cali, Colombia
Berrah, N.	Western Michigan University, Kalamazoo, Michigan
Chakraborty, H.S.	Department of Physics, Indian Institute of Technology—Madras, Madras, India
Cheng, K.T.	Lawrence Livermore National Laboratory
Ceolin, D.	CEA/DRECAM/SPAM, CEN Saclay, 91191 Gif/Yvette Cedex, France
Chernysheva, L.V.	Physical-Technical Institute, St. Petersburg, Russia
Derevianko, A.	University of Nevada, Reno
Deshmukh, P.C.	Department of Physics, Indian Institute of Technology—Madras, Madras, India
Fadley, C.S.	University of California at Davis
Guillemin, R.	Laboratoire de Chimie-Physique Matiere et Rayonnement
Heske, C.	University of Nevada, Las Vegas
Johnson, W.R.	University of Notre Dame
Kanter, E.P.	Argonne National Laboratory
Krässig, B.	Argonne National Laboratory
Langer, B.	Max-Born-Institut, Berlin, Germany

Langhoff, P.W.	San Diego Supercomputer Center, University of California–San Diego
Leclercq, N.	CEA/DRECAM/SPAM, CEN Saclay, 91191 Gif /Yvette Cedex, France
LeGuen, K.	CEA/DRECAM/SPAM, CEN Saclay, 91191 Gif /Yvette Cedex, France
Lubell, M.S.	Department of Physics, City College of New York, New York, New York 10031
Manson, S.T.	Georgia State University
Martin, N.L.S.	University of Kentucky, Lexington, Kentucky 40506
McKoy, V.	California Institute of Technology, Pasadena, California
Miron, C.	CEA/DRECAM/SPAM, CEN Saclay, 91191 Gif /Yvette Cedex, France
Morin, P.	CEA/DRECAM/SPAM, CEN Saclay, 91191 Gif /Yvette Cedex, France
Piancastelli, M.N.	University „Tor Vergata“, Rome, Italy
Rolles, D.	University of Western Michigan
Sheehy, J.A.	Air Force Research Laboratory, AFRL/PRSP, Edwards AFB, CA
Simon, M.	Laboratoire de Chimie-Physique Matiere et Rayonnement
Southworth, S.H.	Argonne National Laboratory
Wehlitz, R.	Synchrotron Radiation Center, University of Wisconsin
Whitfield, S.	University of Wisconsin-Eau Claire, Eau Claire, Wisconsin
Yu, S.-W.	Lawrence Livermore National Laboratory
Zhou, H.L.	Georgia State University
Zimmermann, B.	Max-Planck-Institute for the Physics of Complex Systems, Dresden, Germany

13. Professional Services

- Member of the Nevada Institute of Renewable Energy Commercialization's (NIREC) Technology Commercialization Advisory Board (TCAB) (2010 – 2012)
- Member of the Institutional Management team of the NSHE Nevada Renewable Energy Consortium (NVREC) and the Management Advisory Committee (2009 – 2012)
- Member of the NDA Green Technology Committee (2009 – 2012)
- Reviewer for the American Institute of Physics (Physical Review Letters and Physical Review A)
- Reviewer for the Institute of Physics (Journal of Physics B and the New Journal of Physics)
- Reviewer for the National Science Foundation
- Reviewer for Fonds zur Förderung der wissenschaftlichen Forschung (Austrian Science Fund)
- Physical Review Letters; Physical. Review. B; NSF Sustainable Energy Pathways Review Panel, on sustainability of photovoltaic systems, Proposal reviewer for the Austrian Science Fund

14. Professional Events Organization

- Co-Chair of the Workshop on X-Ray Atomic and Molecular Spectroscopy using Synchrotron Radiation from the Advanced Light Source, UNLV, May 23-24, 1994
- Co-Chair of the Workshop on X-Ray Atomic and Molecular Spectroscopy using Synchrotron Radiation, UNLV, December 6-7, 2001
- Chair of the 2007 Inaugural Energy Symposium, UNLV, August 15-16, 2007
- Member of organizing committee for the first National Clean Energy Summit, UNLV, August 18-19, 2008
- Chair of the UNLV Renewable Energy Symposium, UNLV, August 20, 2008
- Session Chair (Biofuels) of the 42nd Western Regional Meeting of the American Chemical Society, September 23 -27, 2008, Las Vegas, Nevada.
- Chair of the 3rd Annual UNLV Renewable Energy Symposium, UNLV, August 11-12, 2009
- Chair of the Second Annual Nevada Renewable Energy Consortium Meeting, UNLV, August 20, 2010
- Co-Chair and Moderator (Panel 3) of the 2010 UNLV Clean Energy Forum: A Game Changing Agenda for a Sustainable Energy Future, UNLV, September 8, 2010
- Co-Chair (IWP Int. Advisory Com., RIXS Int. Advisory Com., Local Organizing Committee) of the joint workshops the 2011 International Workshop on Photoionization (IWP) and the 2011 International Workshop on Resonant Inelastic X-ray Scattering (RIXS), Las Vegas, Nevada, May 22-27, 2011.
- Organizer and Panelist on public Forum "Fukushima Daiichi Nuclear Power Plant Accident: What happened, could it happen here, and what are the implications to U.S. policy?" at the Barrick Museum Auditorium, Las Vegas, March 21, 2011

- Organizer and Panelist on public forum commemorating the 25th anniversary of the Chernobyl nuclear plant disaster and a round-table discussion on “America’s Portfolio: What is Nuclear Energy’s Role?” at the Barrick Museum Auditorium, Las Vegas, April 26, 2011
- Co-hosted and organized meetings with NSTec and NASA officials to explore research collaborations with UNLV.
- Hosted the Fourth Integrated Symposium on Collaborative Research Initiatives between National Security Technologies, LLC and the University of Nevada, Las Vegas on February 28, 2012.
- Biofuels kick-off meeting phase III at UNLV on September 7, 2012.
- Hosted the first Cyber Security Collaborations Symposium at the Stan Fulton Building September 11, 2012. The symposium and participants were part of a collaboration between HRC/UNLV, Oak Ridge National Laboratory, the University of Tennessee, Louisiana Tech, and Mississippi State University
- Co-organized and co-hosted the USAF-UNLV UAS and Cyber Security Meeting, 7 March, 2013
- Co-organized with USAF and moderated a Symposium called ‘Titans of Industry’, JW Marriott Las Vegas Resort & Spa • 26 & 27 June, 2013

15. Professional Memberships

American Physical Society (1988 to 2014)

American Association for the Advancement of Sciences (2010 to 2014)

16. Teaching

Fall 2001

UNLV Chemistry

Molecular Spectroscopy – CHE 793

17. Publications – Refereed Journal Articles

- 1.) U. Becker, R. Wehlitz, O. Hemmers, B. Langer, and A. Menzel: Observation of Participator Auger Decay following Valence Photoionization with Excitation
Phys. Rev. Lett. 63, 1054-1057 (1989)
- 2.) B. Langer, J. Viehhaus, O. Hemmers, A. Menzel, R. Wehlitz, and U. Becker: High-resolution photoelectron spectrometry study of conjugate shakeup processes in the Li 1s threshold region
Phys. Rev. A 43, Rap. Comm. 1652-1655 (1991)
- 3.) R. Wehlitz, F. Heiser, O. Hemmers, B. Langer, A. Menzel, and U. Becker: Electron-Energy and -Angular Distributions in the Double Photoionization of Helium
Phys. Rev. Lett. 67, 3764-3767 (1991)
- 4.) U. Becker, O. Hemmers, B. Langer, A. Menzel, R. Wehlitz, and W. B. Peatman: Evidence for atomic processes in molecular valence double ionization
Phys. Rev. A 45, R1295-R1298 (1992)
- 5.) U. Becker, O. Hemmers, B. Langer, I. Lee, A. Menzel, R. Wehlitz, and M. Ya. Amusia: Multiplet-changing Auger transitions in valence double photoionization
Phys. Rev. A 47, R767-R770 (1993)
- 6.) O. Hemmers, F. Heiser, J. Eiben, R. Wehlitz, and U. Becker: Observation of Non-isotropic Auger Angular Distribution in the C(1s) Shape Resonance of CO
Phys. Rev. Lett. 71, 987-990 (1993)
- 7.) O. Hemmers, F. Heiser, J. Eiben, R. Wehlitz, and U. Becker: Variation of the C (KVV) Auger angular distribution in the C(1s) σ^* -resonance of CO
Nucl. Instrum. And Methods B87, 209-214 (1994)

- 8.) B. Langer, J. Viefhaus, O. Hemmers, A. Menzel, R. Wehlitz, and U. Becker: Observation of parity-unfavored transitions in the nonresonant photoionization of argon
Phys. Rev. A 51, R882-R885 (1995)
- 9.) N. Saito, F. Heiser, O. Hemmers, A. Hempelmann, K. Wieliczek, J. Viefhaus, and U. Becker: Vibrational-state-dependent decay of the CO C(1s) excitation
Phys. Rev. A 51, R4313-R4316 (1995)
- 10.) T. Liebsch, O. Plotzke, F. Heiser, U. Hergenhahn, O. Hemmers, R. Wehlitz, J. Viefhaus, B. Langer, S.B. Whitfield, and U. Becker: Angle-resolved photoelectron spectroscopy of C₆₀
Phys. Rev. A 52, 457-464 (1995)
- 11.) O. Hemmers, S.B. Whitfield, N. Berrah, B. Langer, R. Wehlitz, and U. Becker: Angular distributions of the C(1s) photoelectron satellites in CO
J. Phys. B 28, L693-L700 (1995)
- 12.) B. Langer, N. Berrah, A. Farhat, O. Hemmers, and J.D. Bozek: Auger resonant Raman spectroscopy used to study the angular distributions of the Xe $4d_{5/2} \rightarrow 6p$ decay spectrum
Phys. Rev. A 53, R1946-R1949 (1996)
- 13.) Norio Saito, Franz Heiser, Oliver Hemmers, Kornel Wieliczek, Jens Viefhaus, and Uwe Becker: Kinetic-energy- and angular-resolved fragmentation of CO in vibrational-resolved C 1s excitation
Phys. Rev. A 54, 2004-2010 (1996)
- 14.) W. Ng, G. Jones, R.C.C. Perera, D. Hansen, J. Daniels, O. Hemmers, P. Glans, S.B. Whitfield, H. Wang, and D.W. Lindle: First Results from the High-Brightness X-Ray Spectroscopy Beamline at ALS
Rev. Sci. Instr. 67, (9) (1996)
- 15.) N. Berrah, B. Langer, J.D. Bozek, T. Gorczyca, O. Hemmers, D.W. Lindle, and O.F. Toader: Angular-distribution parameters and R-matrix calculations of Ar $3s^{-1} \rightarrow np$ Resonances
J. Phys. B 29, 5351-5365 (1996)
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- 29.) O. Hemmers, R. Guillemin, D. Rolles, A. Wolska, D.W. Lindle, E.P. Kanter, B. Krässig, S.H. Southworth, R. Wehlitz, B. Zimmermann, V. McKoy, and P.W. Langhoff: Low-Energy Nondipole Effects in Molecular Nitrogen Valence-Shell Photoionization ALS Activity Report, Science Highlights 2006, p. 72, July 2007
- 30.) K. E. Lipinska-Kalita, C. Segre, P. E. Kalita, O. Hemmers, Y. Ohki, J. Cecil, M. Chavarcha: Novel Oxide Based Nanocomposites: Development and Structural Characterization Bull. Am. Phys. Soc. **53**, No. 2, 713, 2008
- 31.) K. Lipinska, P. Kalita, O. Hemmers, S. Sinogeikin, O. Shebanova, W. Yang, G. Mariotto: Structural Integrity and Microstructure of Na⁺ Conducting Ceramics Bull. Am. Phys. Soc. **55**, No. 2, 993, 2010
- 32.) J. Ma and O. Hemmers: Thermo-economic Analysis of Microalgae Co-firing Process for Fossil Fuel-fired Power Plants, ASME 4th International Conference on Energy Sustainability, May 19-22, Phoenix, Arizona 2010
- 33.) P. Kalita, A. Cornelius, K. Lipinska, **O. Hemmers**, S. Sinogeikin, M. Murshed and T. Gesing: New Structural Phase Transitions in PbMBO₄ Complex Oxides: Raman Spectroscopy and X-ray Diffraction Studies, Bulletin of the American Physical Society, Volume 57, Number 1 2012
- 34.) P. Kalita, A. Cornelius, S. Sinogeikin, K. Lipinska, O. Hemmers, M. Lufaso, Z. Kann, H. Schneider: New Structural Phase Transition in Bi₂(Fe_{4-x}Mn_x)O_{10-x} Complex Oxides and its Implications in the Mullite Family of Materials; Bull. Am. Phys. Soc. 56, No. 1, J17.1 2011
- 35.) P. Kalita, A. Cornelius, K. Lipinska, **O. Hemmers**, S. Sinogeikin, M. Murshed and T. Gesing: New Structural Phase Transitions in PbMBO₄ Complex Oxides: Raman Spectroscopy and X-ray Diffraction Studies. Bulletin of the American Physical Society, Volume 57, Number 1 2012

21. Scientific Presentations – Invited Talks

- 1.) „Photoelektronen-Spektrometrie an CO zwischen 20 und 1000 eV“
DPG-Frühjahrstagung, Freiburg, Germany, March 11-15, 1991
- 2.) „Intrinsische Elektronenanisotropien beim C-KVV Augerzerfall von CO“
DPG-Frühjahrstagung, Hannover, Germany, March 23-27, 1992
- 3.) „Anregungsabhängiges Verhalten der C-KVV Satelliten-Augerlinien von CO im Shape Resonanz Bereich“
DPG-Frühjahrstagung, Berlin, Germany, March 15-19, 1993
- 4.) “Variation of the C (KVV) Auger angular distribution in the C(1s) σ^* -resonance of CO”
Sixteenth International Conference on X-Ray and Inner-Shell Processes (X-93), Debrecen, Hungary, July 12-16, 1993
- 5.) “Electron and Ion Time of Flight Spectroscopy with Synchrotron Radiation”
Department of Chemistry, University of Nevada, Las Vegas, USA, February 24, 1995
- 6.) “First Order Corrections of the Dipole Approximation for Angular-Distribution Effects in Valence Photoemission”
Department of Chemistry, University of Nevada, Las Vegas, USA, October 18, 1996
- 7.) “First Order Corrections of the Dipole Approximation for Angular-Distribution Effects in Valence Photoemission”
Workshop on Atomic and Molecular Physics at the Advanced Light Source, Berkeley, CA, USA, October 23, 1996
- 8.) “Non-Dipole Effects in Atoms and Molecules”
Joint Meeting of the APS/AAPT with DAMOP and CAM’97, Washington, D.C., USA, April 20, 1997
- 9.) “Beyond the Dipole Approximation: Angular-Distribution Effects in the 1s Photoemission from Small Molecules”
Eighteenth International Conference on X-ray and Inner-Shell Processes (X-99), Chicago, IL, USA, August 24, 1999
- 10.) “Non-Dipolar Effects in Soft X-Ray Photoemission”
Advanced Light Source Users’ Meeting, Berkeley, CA, USA, October 19, 1999
- 11.) “Non-Dipolar Effects in Soft X-Ray Photoemission”
Pan American Advanced Studies Institute (PASI), Atoms and Molecules in a New Light, Angra dos Reis, Brasil, May 2, 2000
- 12.) “Photoelectron Spectroscopy and the Dipole Approximation”
Sixteenth International Conference on the Application of Accelerators in Research and Industry (CAARI 2000), Denton, TX, USA, November 2, 2000
- 13.) “Large Nondipole Effects in the Core-Level Threshold Regions of Small Molecules”
Seminar Talk, Lure, Paris, France, November 12, 2001
- 14.) “Large Nondipole Effects in the Core-Level Threshold Regions of Small Molecules”
Seminar Talk, Fritz-Haber-Institut of the Max-Planck Society, Berlin, Germany, November 16, 2001
- 15.) “High-Resolution Electron Time-of-Flight Spectroscopy”
Seminar Talk, Lawrence Livermore National Laboratory, Livermore, CA, December 13, 2002

16.) "Macroscopic Effects in Nondipolar Photoemission: First Measurements of Drag Currents"
International Workshop on Photoionization (IWP), Campinas, Brazil, July 2005

17.) Invited Presentation at Brookings in Washington D.C. on "Climate Research – Another Look and New Perspectives", November 6, 2012

18.) Poster presentation "Explore the Six Fundamentals UNLV Accelerated: High-Energy X-Ray Applications (HEXA)" and tour of the UNLV Accelerator Facility, UNLV-NSTec Symposium, March 28, 2014

22. Public Presentations – Invited Talks

1.) "Latest Development in Backing Up Data"
CEO-CFO group of Southern Nevada on January 15, 2004

2.) "Renewable Energy Projects at UNLV"
NSHE Board of Regent's RED committee on January 18, 2007

3.) "Solar, Hydrogen, Bio-Fuels & Sustainability Projects at UNLV"
CEO-CFO group of Southern Nevada on April 27, 2007

4.) "Solar Energy Initiatives in Nevada"
The Las Vegas Future Salon on July 13, 2007

5.) Presentations on „UNLV's renewable energy (algae) research“ at the CEO-CFO group of Southern Nevada in June 2008

6.) Presentation on "Biofuels-Sense and Nonsense" Las Vegas Southwest Rotary Club, July 21, 2008.

7.) Presentation on „Renewable Energy Technologies: Gaps, Challenges and Solutions“ at the Global Commerce Forum's International Conference on Energy, Logistics & the Environment at the Mirage Hotel, Las Vegas, October 29, 2008

8.) Panelist in round-table discussion on "Reducing U.S. Dependence on Foreign Oil: Lessons from Abroad" at Renaissance Hotel, Las Vegas, November 14, 2008

9.) Key-note speaker at the AECOM Energy Forum on "Renewable Energy Technologies: Gaps, Challenges and Solutions" at the Phoenician, Phoenix, AZ on November 19, 2008

10.) Presenter and Panelist at the Global Commerce Forum's 2nd International Conference on Energy, Logistics & the Environment on "Renewable Energy Technologies and Gaps" Panel Discussion and Case Studies at the Mirage Hotel, Las Vegas, October 24, 2009

11.) Panelist in round-table discussion on "America's Portfolio: What is Nuclear Energy's Role?" at The Atomic Testing Museum, Las Vegas, March 4, 2010

12.) Presentation on "Renewable Energy Projects in Nevada" at the Global Commerce Forum's 3rd International Conference on Energy, Logistics & the Environment on "Renewable Energy Technologies and Gaps Panel" at the Grand Hyatt Hotel, Denver, October 8-9, 2010

13.) Organizer and Panelist of the Forum "Fukushima Daiichi Nuclear Power Plant Accident: What happened, could it happen here, and what are the implications to U.S. policy?" at the Barrick Museum Auditorium, Las Vegas, March 21, 2011

14.) Participated in round-table hosted by the Nevada Business Magazine, titled "Industry Focus: Alternative Energy", Reno, Nevada, January 12, 2011, Find article at:
<https://www.nevadabusiness.com/2011/03/industry-focus-alternative-energy/>

15.) Organizer and Panelist commemorating the 25th anniversary of the Chernobyl nuclear plant disaster and a round-table discussion on "America's Portfolio: What is Nuclear Energy's Role?" at the Barrick Museum Auditorium, Las Vegas, April 26, 2011

16.) Attended the Young Professionals in Energy (YPE) Summit in Las Vegas, held April 23-25, 2012. The booth, entitled "Clean Energy Education and Research are Hot in Nevada," also featured UNR and DRI, and was in cooperation with the Nevada Institute for Renewable Energy Commercialization (NIREC)

17.) Participated in round-table hosted by the Nevada Business Magazine, titled "Industry Focus: Alternative Energy", Reno, Nevada, March 6, 2013, Find article at: <http://www.nevadabusiness.com/2013/04/industry-focus-alternative-energy-4/>

18.) Invited to participate in the "Alternative Energy Roundtable" discussion, Nevada Business Magazine, Reno, NV, February 12, 2014. Article published at: <http://www.nevadabusiness.com/2014/03/industry-focus-alternative-energy-5/>

19.) Moderator of the public panel to the 3rd anniversary of Fukushima Daiichi Nuclear Power Plant Accident, organized by the American Nuclear Society-Nevada Chapter, at the Auditorium of the National Atomic Testing Museum, Las Vegas, Nevada, April 24, 2014

20.) Presentation on "Why Climate Models Fail" at the Bob Maheu First Wednesday luncheon, Las Vegas Country Club, Las Vegas, Nevada, July 9, 2014

21.) Presentation on "Why Climate Models Fail" at the American Nuclear Society-Nevada Chapter, at the Science and Engineering Building at UNLV, Las Vegas, Nevada, July 10, 2014

22.) Presentation on "The Science of Climate Change" at the Nevada Legislative Committee on Energy, Las Vegas, Nevada, February 8, 2016

23.) Presentation on "Quantum Computing – Speed, Encryption, Security" Aasim Cyber Group, at the Innevation Center, Las Vegas, Nevada, February 25, 2016

24.) Presentation on "Clean Energy Projects at the UNLV Harry Reid Center", October 17, 2021, Cesar's Palace at the 14th International Conference on Climate Change (ICCC-14) in Las Vegas, NV, October 15-17, 2021

23. Scientific Presentations – Conferences

Eleventh International Conference on Atomic Physics (ELICAP), Paris, France, July 4-8, 1988

1. U. Becker, O. Hemmers, B. Langer, H.-G. Kerkhoff, M. Kupsch, A. Sivasli, D. Szostak, and R. Wehlitz
 Probing Electron Correlations: Multi-Electron-Processes in Photoionization

Symposium on the Auger Effect, Paris, France, March 30-31, 1989

2. U. Becker, O. Hemmers, B. Langer, and R. Wehlitz
 Participator Auger decay following inner-valence photoionization - a new type of Auger transition

Third European Conference on Atomic and Molecular Physics (ECAMP 3), Bordeaux, France, April 3-7, 1989

3. U. Becker, O. Hemmers, B. Langer, A. Menzel, and R. Wehlitz
Radiationless decay of excited inner-valence hole states in neon

4. U. Becker, O. Hemmers, H.-G. Kerkhoff, M. Kupsch, B. Langer, and R. Wehlitz
Valence and inner-shell photoionization of CO between 30 and 1000 eV

Ninth International Conference on Vacuum Ultraviolet Radiation Physics (VUV9), Honolulu, Hawaii, USA, July 17-21, 1989

5. U. Becker, O. Hemmers, B. Langer, A. Menzel, J. Viefhaus, and R. Wehlitz
Photoelectron asymmetries and threshold behavior of conjugate shake-up satellites associated with 1s and 2s photoionization

Sixteenth International Conference on the Physics of Electronic and Atomic Collisions (XVI. ICPEAC), New York, NY, USA, July 26-August 1, 1989

6. U. Becker, O. Hemmers, B. Langer, A. Menzel, and R. Wehlitz
Auger decay of valence vacancies in rare gases

54. Physikertagung, München, Germany, March 12-16, 1990

7. J. Viefhaus, B. Langer, O. Hemmers, A. Menzel, R. Wehlitz und U. Becker
Hochauflösende Untersuchung des Li 1s "Conjugate shake-up"- Übergangs

8. F. Heiser, A. Menzel, O. Hemmers, B. Langer, R. Wehlitz und U. Becker
Bestimmung der Anisotropie-Koeffizienten verschiedener Xe 4d Augerübergänge

9. B. Langer, V. v. Garnier, O. Hemmers, A. Menzel, R. Wehlitz und U. Becker
Zur Photoionisation der Cd 4d Schale

10. R. Wehlitz, O. Hemmers, B. Langer, A. Menzel und U. Becker
Untersuchung von Valenz-Doppelionisationsprozessen mittels winkelaufgelöster Photoelektronenspektroskopie

Fifteenth International Conference on X-Ray and Inner-Shell Processes (X-90), Knoxville, TN, USA, July 9-13, 1990

11. B. Langer, V.v. Garnier, O. Hemmers, A. Menzel, R. Wehlitz, and U. Becker
Angular Distributions of Photoelectrons and Electron Correlation Satellites of 4d Photoionization in Atomic Cadmium

12. B. Langer, J. Viefhaus, O. Hemmers, A. Menzel, R. Wehlitz, and U. Becker
Li 1s conjugate shake-up processes

Twelfth International Conference on Atomic Physics (12. ICAP), Ann Arbor, MI, USA, July 29-August 3, 1990

13. R. Wehlitz, O. Hemmers, B. Langer, A. Menzel, and U. Becker
Energy- and angular-distribution of shake-off electrons of He near threshold

DPG-Frühjahrstagung, Freiburg, Germany, March 11-15, 1991

14. R. Wehlitz, O. Hemmers, B. Langer, A. Menzel und U. Becker
Winkelverteilungen-Asymmetrien von Shake-off Elektronen in Schwellnähe

15. J.C. Allman, U. Becker, M. Domke, F. Heiser, O. Hemmers, G. Kaindl, L.J. Medhurst, O. Plotzke, A. Puschmann, D.A. Shirley, J. Viefhaus
Nullvoltelektronen und Ionisationsspektroskopie im weichen Röntgenbereich

16. J.C. Allman, U. Becker, M. Domke, F. Heiser, O. Hemmers, G. Kaindl, L.J. Medhurst, O. Plotzke, A. Puschmann, D.A. Shirley, J. Viefhaus
High-Resolution Zerovolt-Electron and Ion-Yield Spectroscopy with Soft X-Rays

17. O. Hemmers, B. Langer, A. Menzel, R. Wehlitz und U. Becker
Photoelektronen-Spektrometrie an CO zwischen 20 und 1000 eV

Seventeenth International Conference on the Physics of Electronic and Atomic Collisions (XVII. ICPEAC), Brisbane, Australia, July 10-16, 1991

18. U. Becker, O. Hemmers, B. Langer, A. Menzel, and R. Wehlitz
Evidence for Sequential Processes in Molecular Valence Double Ionization

19. U. Becker, J. Eiben, F. Heiser, O. Hemmers, and R. Wehlitz
Molecular Orientation and Intrinsic Auger Anisotropy Following K-Shell Photoionization of CO

20. R. Wehlitz, O. Hemmers, B. Langer, A. Menzel, and U. Becker
Two-Electron Emission in the Valence Photoionization of Rare Gases

DPG-Frühjahrstagung, Hannover, Germany, March 23-27, 1992

21. B. Langer, W. Mahler, O. Hemmers, A. Menzel, R. Wehlitz und U. Becker
Anregungsenergieabhängiges Verhalten der Ar 3s und Xe 5s Korrelationsatelliten

22. A. Menzel, O. Hemmers, B. Langer, R. Wehlitz und U. Becker
Winkelverteilungen der Zerfallelektronen von rumpfangeregtem HCl

23. O. Hemmers, J. Eiben, F. Heiser, R. Wehlitz und U. Becker
Intrinsische Elektronenanisotropien beim C-KVV Augerzerfall von CO

Fourth European Conference on Atomic and Molecular Physics (ECAMP 4), Riga, Latvia, April 6-10, 1992

24. R. Wehlitz, O. Hemmers, B. Langer, A. Menzel, and U. Becker
Electron-energy and -Angular Distributions in the Double Photoionization of Rare Gases

25. U. Becker, O. Hemmers, B. Langer, A. Menzel, and R. Wehlitz
Evidence for Atomic Processes in Molecular Valence Double Ionization

26. B. Langer, W. Mahler, O. Hemmers, A. Menzel, R. Wehlitz, and U. Becker
Photon Energy Dependent Behavior of the Valence Electron Correlation Satellites in Argon and Xenon

27. O. Hemmers, F. Heiser, J. Eiben, R. Wehlitz, and U. Becker
Intrinsic Auger Anisotropies in the C-KVV Auger Decay of CO

28. A. Menzel, O. Hemmers, B. Langer, R. Wehlitz, and U. Becker
Angular Distributions of Electrons in the Decay-Spectra of Core-excited HCl

Tenth International Conference on Vacuum Ultraviolet Radiation Physics (VUV10), Paris, France, July 27-31, 1992

29. U. Becker, O. Hemmers, B. Langer, I. Lee, A. Menzel, R. Wehlitz, and M.Ya. Amusia

Multiplet-Changing Auger Transitions in Valence Double Photoionization

30. B. Langer, O. Hemmers, A. Menzel, R. Wehlitz, and U. Becker
He $n = 2$ Satellite Production Reconsidered

31. A. Menzel, O. Hemmers, B. Langer, R. Wehlitz, and U. Becker
Alignment Transfer in the Dissociation of Core-excited HCl

32. O. Hemmers, F. Heiser, J. Eiben, R. Wehlitz, and U. Becker
Shape Resonance Induced Alignment Variation Observed via C-KVV Diagram and Satellite Auger Transitions of CO

Thirteenth International Conference on Atomic Physics (13. ICAP), München, August 3-7, Germany, 1992

33. B. Langer, J. Viehhaus, O. Hemmers, A. Menzel, R. Wehlitz, and U. Becker
Observation of Parity Unfavoured Transitions in the Nonresonant Photoionization of Argon

International Workshop on Photoionization (IWP-92), Berlin, Germany, August 24-28, 1992

34. B. Langer, J. Viehhaus, O. Hemmers, A. Menzel, R. Wehlitz, and U. Becker
Observation of Parity Unfavoured Transitions in the Nonresonant Photoionization of Argon

35. U. Becker, O. Hemmers, B. Langer, I. Lee, A. Menzel, R. Wehlitz, and M. Ya. Amusia
Multiplet-changing Auger Transitions in Valence Double Photoionization

36. A. Menzel, O. Hemmers, B. Langer, R. Wehlitz, and U. Becker
Alignment Transfer in the Dissociation of Core-excited HCl

DPG-Frühjahrstagung, Berlin, Germany, March 15-19, 1993

37. A. Menzel, O. Hemmers, B. Langer, R. Wehlitz und U. Becker
Untersuchung der Valenz- und Innerschalen-Photoionisation von HCl

38. V. Dzidzonou, J. Viehhaus, O. Hemmers, B. Langer und U. Becker
Untersuchung der Photoionisation von HgCl₂

39. O. Hemmers, F. Heiser, J. Eiben, R. Wehlitz und U. Becker
Anregungsabhängiges Verhalten der C-KVV Satelliten-Augerlinien von CO im Shape-Resonanz Bereich

40. R. Wehlitz, O. Hemmers, B. Langer, A. Menzel und U. Becker
Die Elektronen-Winkelverteilung bei der Doppelionisation von He

Fifteenth International Symposium on Molecular Beams (ISMB-15), Berlin, Germany, May 16-21, 1993

41. U. Becker, F. Heiser, O. Hemmers, A. Menzel, and R. Wehlitz
Ionization and fragmentation of core excited molecules

Sixteenth International Conference on X-Ray and Inner-Shell Processes (X-93), Debrecen, Hungary, July 12-16, 1993

42. O. Hemmers, F. Heiser, J. Eiben, R. Wehlitz, and U. Becker
Variation of the C-KVV Auger Angular-Distribution in the C $1s \sigma^*$ - Resonance of CO

43. A. Menzel, O. Hemmers, B. Langer, R. Wehlitz, and U. Becker
Study of the Cl $2p$ Excitation and Ionization in HCl

Eighteenth International Conference on the Physics of Electronic and Atomic Collisions (XVIII. ICPEAC), Århus, Denmark, July 21-27, 1993

44. R. Wehlitz, O. Hemmers, B. Langer, A. Menzel, and U. Becker
Angular Distribution of Photoelectrons Following Double Ionization of He

58. Physikertagung, Hamburg, Germany, March 14-18, 1994

45. T. Liebsch, O. Plotzke, F. Heiser, U. Hergenhahn, O. Hemmers, R. Wehlitz und U. Becker
Winkelaufgelöste Elektronenspektroskopie an C_{60}

46. R. Wehlitz, J. Viefhaus, O. Hemmers und U. Becker
Beobachtung ausgeprägter n -Abhängigkeiten beim Zerfall der Ne $1s \rightarrow np$ Resonanzen

47. A. Menzel, O. Hemmers, B. Langer, J. Viefhaus, R. Wehlitz und U. Becker
Elektronische Relaxation vs. schnelle Dissoziation beim Zerfall der Cl $2p$ Anregungen von HCl und DCI

1994 Annual Meeting of the Division of Atomic, Molecular, and Optical Physics (DAMOP), Washington, DC, USA, April 18-21, 1994

48. U. Becker, N. Berrah, O. Hemmers, B. Langer, J. Viefhaus, R. Wehlitz, and S. B. Whitfield
Pronounced n -Dependences of Auger Spectra after Ne $1s \rightarrow np$ Excitations

Gordon Research Conference on Electron Spectroscopy, New England College, New Hampshire, USA, July 3-8, 1994

49. U. Becker, F. Heiser, O. Hemmers, and K. Wieliczek
Angle resolved studies of photodissociation dynamics of small molecules

Fourteenth International Conference on Atomic Physics (14. ICAP) Boulder, Colorado, USA, July 31-August 5, 1994

50. U. Becker, N. Berrah, O. Hemmers, U. Hergenhahn, B. Langer, J. Viefhaus, R. Wehlitz, and S.B. Whitfield
Double Ionization Following $1s \rightarrow np$ Excitation of Atomic Neon

European Conference on Atomic and Molecular Physics (ECAMP-5), Edinburgh, UK, April 3-7, 1995

51. F. Heiser, N. Saito, K. Wieliczek, O. Hemmers, N. Berrah and U. Becker
Angle resolved ionic fragmentation studies of small molecules

1995 Annual Meeting of the Division of Atomic, Molecular, and Optical Physics (DAMOP), Toronto, Ontario, Canada, May 16-19, 1995

52. B. Langer, O. Hemmers, O. Toader, J.D. Bozek, and N. Berrah
Angle Resolved High Resolution Studies of the Xe $4d^{-1} \rightarrow 5p^{-2}np$ Resonances

53. A. Farhat, B. Langer, O. Hemmers, M. Humphrey, N. Berrah
Photoionization with Excitation of the 4s and 4p Subshells in Krypton

54. N. Berrah, O. Toader, B. Langer, J.D. Bozek, D.W. Lindle, O. Hemmers
Autoionization of Ar, Kr, and Xe near the ns threshold-determination of partial cross section and β parameter in ns- ϵp transitions

Nineteenth International Conference on the Physics of Electronic and Atomic Collisions (XIX. ICPEAC), Whistler, Canada, July 26-August 1, 1995

55. B. Langer, N. Berrah, J.D. Bozek, O. Hemmers, D.W. Lindle, and O. Toader
High Resolution Angle Resolved Photoelectron Spectroscopy at the ALS: The $Ar3s^{-1} \rightarrow np$ Resonances

56. F. Heiser, N. Saito, K. Wieliczek, O. Hemmers, N. Berrah and U. Becker
Fragmentation dynamics of core excited molecules

57. N. Saito, F. Heiser, O. Hemmers, A. Hempelmann, K. Wieliczek, J. Viefhaus and U. Becker
High resolution ionic fragmentation studies of small molecules

Eleventh International Conference on Vacuum Ultraviolet Radiation Physics (VUV-11), Tokyo, Japan, August 27-September 1, 1995

58. R.C.C. Perera, W. Ng, G. Jones, O. Hemmers, P. Glans, S. Whitfield, H. Wang, D.W. Lindle
Results from the High-Brightness X-Ray Spectroscopy Beamline at ALS for 2-5 keV Region

59. F. Heiser, N. Saito, K. Wieliczek, O. Hemmers, N. Berrah and U. Becker
Dissociation dynamics of small molecules

National Synchrotron Radiation Instrumentation Meeting (SRI-95), Argonne, Illinois, USA, October 18-25, 1995

60. W. Ng, G. Jones, R.C.C. Perera, D. Hansen, J. Daniels, O. Hemmers, P. Glans, S.B. Whitfield, H. Wang, and D.W. Lindle
First Results from the High-Brightness X-Ray Spectroscopy Beamline at ALS

Advanced Light Source Users' Association Annual Meeting, Berkeley, CA, October 23-24, 1995

61. P. Glans, D. Hansen, O. Hemmers, H. Wang, S.B. Whitfield, D.W. Lindle, W.C. Stolte, J.A.R. Samson
Ion Time-of-Flight Spectroscopy of CH_3Cl

62. D.L. Hansen, P. Glans, O. Hemmers, H. Wang, S.B. Whitfield, D.W. Lindle, W. Ng, R.C.C. Perera, G. Fisher, W.C. Stolte, J.C. Levin
Ion Time of Flight Mass Spectroscopy at Beamline 9.3.1

63. W.C. Stolte, J.A.R. Samson, D.L. Hansen, P. Glans, O. Hemmers, H. Wang, S.B. Whitfield, D.W. Lindle
K-Shell Excitation and Photoionization of Atomic Oxygen

64. O. Hemmers, G. Fisher, P. Glans, D.L. Hansen, H. Wang, S.B. Whitfield, D.W. Lindle, R. Wehlitz, J.C. Levin, and I.A. Sellin
First Results of Non-Dipole Measurements on Beamline 8.0

DPG-Frühjahrstagung, Rostock, Germany, March 18-22, 1996

65. A. Hempelmann, F. Heiser, O. Hemmers, N. Saito, J. Viefhaus, K. Wieliczek, und U. Becker
Hochaufgelöste Ionisations- und Nullvoltspektroskopie kleiner Moleküle

1996 Annual Meeting of the Division of Atomic, Molecular, and Optical Physics (DAMOP), Ann Arbor, MI, USA, May 15-18, 1996

66. A. Farhat, B. Langer, N. Berrah, O. Hemmers, J.D. Bozek
Angle Resolved Study of the $Xe 4d \rightarrow 6p$ Resonant Auger Process with High Resolution

67. R. Wehlitz, I.A. Sellin, O. Hemmers, S.B. Whitfield, D.W. Lindle, B. Langer, N. Berrah, J. Viefhaus, and U. Becker
Ionization-Excitation of Helium at High Photon Energies

68. O. Hemmers, G. Fisher, P. Glans, D.L. Hansen, H. Wang, S.B. Whitfield, D.W. Lindle, R. Wehlitz, J.C. Levin, and I.A. Sellin
Non-Dipolar Angular Distributions of Ne 2s and 2p Valence Photoelectrons

69. W.C. Stolte, Y. Lu, J.A.R. Samson, D.L. Hansen, S.B. Whitfield, P. Glans, H. Wang, O. Hemmers, D.W. Lindle
Effects of Post-Collision Interaction for the Auger decay of the Oxygen K-Shell

Seventeenth International Conference on X-Ray and Inner-Shell Processes (X-96), Hamburg, Germany, September 9-13, 1996

70. O. Hemmers, R. Wehlitz, G. Fisher, P. Glans, D.L. Hansen, H. Wang, S.B. Whitfield, J.C. Levin, I.A. Sellin, and D.W. Lindle
Non-Dipole Effects in Ne and Xe below 1.2 keV

71. H. Wang, P. Glans, O. Hemmers, S.B. Whitfield, and D.W. Lindle
An Autoionization Study of Argon 2p Satellites Excited near the Argon 2s Threshold

72. N. Berrah, B. Langer, A. Farhat, O. Hemmers, J.D. Bozek
Angle Resolved High Resolution Studies of the Xe $4d_{5/2} \rightarrow 6p$ Resonance

Advanced Light Source Users' Association Annual Meeting, Berkeley, CA, October 21-22, 1996

73. O. Hemmers, S.B. Whitfield, P. Glans, H. Wang, D.L. Hansen, G. Fisher, D.W. Lindle, R. Wehlitz, J.C. Levin, I.A. Sellin, R.C.C. Perera, E.W.B. Dias, H.S. Chakraborty, P.C. Deshmukh, S.T. Manson
Non-Dipole Effects in Ne and Xe below 1.2 keV

74. R. Wehlitz, I.A. Sellin, O. Hemmers, S.B. Whitfield, P. Glans, H. Wang, D.W. Lindle, B. Langer, N. Berrah, J. Viefhaus, U. Becker
Photon energy dependence of ionization-excitation in helium at medium energies

75. H. Wang, G.B. Armen, P. Glans, O. Hemmers, R. Wehlitz, S. B. Whitfield, and D. W. Lindle
An Autoionization Study of Argon 2p Satellites Excited near the Argon 2s Threshold

1997 Joint Meeting of the APS/AAPT with DAMOP and CAM'97, Washington, D.C., USA, April 18-21, 1997

76. R. Wehlitz, I.A. Sellin, O. Hemmers, S.B. Whitfield, P. Glans, H. Wang, D.W. Lindle, B. Langer, N. Berrah, J. Viefhaus, and U. Becker
Partial Photoionization Cross-Sections of Helium Satellites at Medium Photon Energies

77. S.T. Manson, E.W.B. Dias, H.S. Chakraborty, P.C. Deshmukh, O. Hemmers, G. Fisher, P. Glans, D.L. Hansen, H. Wang, S.B. Whitfield, D.W. Lindle, R. Wehlitz, J.C. Levin, I.A. Sellin, and R.C.C. Perera
Breakdown of the Independent Particle Approximation in High-Energy Photoionization

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78. S.T. Manson, E.W.B. Dias, H.S. Chakraborty, P.C. Deshmukh, O. Hemmers, G. Fisher, P. Glans, D.L. Hansen, H. Wang, S.B. Whitfield, D.W. Lindle, R. Wehlitz, J.C. Levin, I.A. Sellin, and R.C.C. Perera
Breakdown of the Independent Particle Approximation in High-Energy Photoionization

Twentieth International Conference on the Physics of Electronic and Atomic Collisions (XX. ICPEAC), Vienna, Austria, July 23-29, 1997

79. S.T. Manson, E.W.B. Dias, H.S. Chakraborty, P.C. Deshmukh, O. Hemmers, G. Fisher, P. Glans, D.L. Hansen, H. Wang, S.B. Whitfield, D.W. Lindle, R. Wehlitz, J.C. Levin, I.A. Sellin, and R.C.C. Perera
Breakdown of the Independent Particle Approximation in High-Energy Photoionization

Advanced Light Source Users' Association Annual Meeting, Berkeley, CA, October 13-14, 1997

80. O. Hemmers, P. Glans, H. Wang, D.W. Lindle, R. Wehlitz, J.C. Levin, I.A. Sellin, R.C.C. Perera
Beyond the Dipole Approximation: Angular-Distribution Effects in Molecular Nitrogen

81. O. Hemmers, P. Glans, D.L. Hansen, H. Wang, S.B. Whitfield, D.W. Lindle, E.W.B. Dias, H.S. Chakraborty, P.C. Deshmukh, S.T. Manson, R. Wehlitz, J.C. Levin, I.A. Sellin, and R.C.C. Perera
Breakdown of the Independent Particle Approximation in High-Energy Photoionization

Nevada Science and Technology Symposium, Univ. of Nevada, Las Vegas, Nevada, January 9, 1998

82. D.W. Lindle, O. Hemmers, P. Glans, H. Wang, R. Wehlitz, J.C. Levin, I.A. Sellin
Beyond the Dipole Approximation: Angular-Distribution Effects in N₂

1998 Annual Meeting of the Division of Atomic, Molecular, and Optical Physics (DAMOP), Santa Fe, NM, USA, May 27 - 30, 1998

83. J. York, S.B. Whitfield, P. Glans, D.L. Hansen, O. Hemmers, H. Wang, D.W. Lindle, R. Wehlitz, I.A. Sellin
Non-dipole Effects in the Photoionization of the Xe $n = 4$ and $n = 5$ Subshells

84. O. Hemmers, P. Glans, H. Wang, D.W. Lindle, R. Wehlitz, J.C. Levin, I.A. Sellin, R.C.C. Perera
Beyond the Dipole Approximation: Angular-Distribution Effects in N₂

Twelfth International Conference on Vacuum Ultraviolet Radiation Physics (VUV-12), San Francisco, California, USA, August 3-7, 1998

85. H. Wang, P. Glans, O. Hemmers, S.B. Whitfield, D.W. Lindle, R. Wehlitz, I.A. Sellin, G.B. Armen, J.C. Levin, R.C.C. Perera
An Angle-Resolved Autoionization Study of the Argon 2*p* Satellites Excited Near the Argon 2*s* Threshold

86. O. Hemmers, H. Wang, P. Glans, R. Wehlitz, P. Focke, J.C. Levin, I.A. Sellin, R.C.C. Perera, P.W. Langhoff, J.A. Sheehy, J.D. Mills, D.W. Lindle
Beyond the Dipole Approximation: Angular-Distribution Effects in 1*s* Photoemission from Small Molecules

Advanced Light Source Users' Association Annual Meeting, Berkeley, CA, October 22-23, 1998

87. D.L. Hansen, O. Hemmers, H. Wang, D.W. Lindle, H.S. Chakraborty, P.C. Deshmukh, S.T. Manson:
High-Energy Valence Photoionization of Argon
Effect of Interaction with 3*s* Photoionization Channels

88. O. Hemmers, H. Wang, P. Glans, W. Stolte, R. Wehlitz, P. Focke, J.C. Levin, I.A. Sellin, R.C.C. Perera, P.W. Langhoff, J.A. Sheehy, J.D. Mills, D.W. Lindle: Beyond the Dipole Approximation
Angular-Distribution Effects in 1*s* Photoemission from Small Molecules

1999 Centennial Meeting of the American Physical Society, Atlanta, GA, USA, March 20-26, 1999

89. W.R. Johnson, A. Derevianko, K.T. Cheng, V.K. Dolmatov, S.T. Manson, O. Hemmers, S. Oblad, P. Glans, S.B. Whitfield, H. Wang, D.W. Lindle, R. Wehlitz, I.A. Sellin
RPA studies of nondipolar angular-distribution asymmetry parameters in the $n = 2$ shell of neon

90. W.C. Stolte, D.L. Hansen, H. Wang, O. Hemmers, D.W. Lindle, I.D. Lopez, A. Rizvi, A.S. Schlachter, M.S. Lubell
Production of oxygen anions in the K-shell photoionization of CO

91. D.L. Hansen, O. Hemmers, H. Wang, D.W. Lindle, H.S. Chakraborty, P.C. Deshmukh, and S.T. Manson:
High-Energy Valence Photoionization of Argon
Effect of Interaction with 3s Photoionization Channels

92. O. Hemmers, H. Wang, D.W. Lindle, P. Focke, I.A. Sellin, J.A. Sheehy, J.D. Mills, and P.W. Langhoff:
Beyond the Dipole Approximation
Angular-Distribution Effects in the 1s Photoemission from Small Molecules

Twentyfirst International Conference on the Physics of Electronic and Atomic Collisions (XXI. ICPEAC), Sendai, Japan, July 22-27, 1999

93. A. Hempelmann, N. Saito, F. Heiser, O. Hemmers, K. Wieliczek, J. Viefhaus, and U. Becker
Evidence for Fragmentation Channel Dependent Linewidth Narrowing in K-Shell Photoexcitation Spectroscopy of N₂ and CO

94. O. Hemmers, P. Glans, H. Wang, S.B. Whitfield, D.W. Lindle, R. Wehlitz, I.A. Sellin, A. Derevianko, and W.R. Johnson
First and Second Order Corrections to the Dipole Approximation observed in neon below 1000 eV

Berkeley Lab Center for Science and Engineering Education, Summer Student Poster Session, Berkeley, CA, USA, August 4, 1999

95. M. Blackburn, F. Schlachter, and O. Hemmers
Hard Exams? (In Atomic & molecular Spectroscopy)

Eighteenth International Conference on X-Ray and Inner-Shell Processes (X-99), Chicago, IL, USA, August 23-27, 1999

96. O. Hemmers, H. Wang, D.W. Lindle, P. Focke, I.A. Sellin, J.A. Sheehy, J.D. Mills, and P.W. Langhoff:
Beyond the Dipole Approximation
Angular-Distribution Effects in the 1s Photoemission from Small Molecules

97. O. Hemmers, P. Glans, H. Wang, S.B. Whitfield, D.W. Lindle, R. Wehlitz, I.A. Sellin, A. Derevianko, and W.R. Johnson
First and Second Order Corrections to the Dipole Approximation observed in neon below 1000 eV

98. P.R. Focke, O. Hemmers, H. Wang, I.A. Sellin, J.C. Levin, and D.W. Lindle
Angular Distribution of Xe M-NN Auger Decay following 834 eV Photoionization

Advanced Light Source Users' Association Annual Meeting, Berkeley, CA, October 18-20, 1999

99. O. Hemmers, P. Glans, H. Wang, S.B. Whitfield, D.W. Lindle, R. Wehlitz, I.A. Sellin, A. Derevianko, W.R. Johnson
Comprehensive Photoelectron Angular Distributions Study of the Valence Shells in Neon

100. P.R. Focke, O. Hemmers, H. Wang, I.A. Sellin, J.C. Levin, and D.W. Lindle
Angular Distribution of Xe M-NN Auger Decay Following 834 eV Photoionization

2000 Annual Meeting of the Division of Atomic, Molecular, and Optical Physics (DAMOP), Storrs, Ct, USA, June 14 - 17, 2000

101. P.W. Langhoff, J.C. Arce, J.A. Sheehy, O. Hemmers, H. Wang, D.W. Lindle, P. Focke, I.A. Sellin
On the angular distributions of electrons photoejected from fixed-in-space and randomly oriented molecules

Southern Nevada Summer Research Experience Programs, UNLV-EPSCoR, Summer 2000

102. M. Lotrakul, O. Hemmers, and D.W. Lindle
Dipole/Nondipole Angular-Distribution Effects in CO by Time-of-Flight Photoelectron Spectroscopy with Synchrotron Radiation

Eighth International Conference on Electronic Spectroscopy & Structure (ICCESS8), Berkeley, CA, USA, August 8-12, 2000

103. H.Wang, O. Hemmers, P. Focke, M.M. Sant'Anna, D. Lukic, M. Grush, I.A. Sellin and D.W. Lindle
Observation of Non-Dipolar Effects of Xenon *4d* Photoelectrons in the Vicinity of Cooper Minimum

104. H. Wang, G. Snell, O. Hemmers, B. Langer, M.M. Sant'Anna, N. Berrah, and D.W. Lindle
Dipolar Angular Distributions and Branching Ratio of Xenon *4d* Photoelectrons in the Photon Energy Range of 100-250 eV

105. H. Wang, O. Hemmers, P. Focke, M.M. Sant'Anna, D. Lukic, C. Heske, R.C.C. Perera, I.A. Sellin, and D.W. Lindle
Non-Dipolar and Dipolar Angular Distribution of S *2s* and *2p* of SF₆ Core-Level Photoionization in the Vicinity of F *1s* Excitation

Advanced Light Source Users' Association Annual Meeting, Berkeley, CA, October 16-18, 2000

106. D.L. Hansen, W.C. Stolte, M.N. Piancastelli, I. Dominguez Lopez, A. Rizvi, O. Hemmers, H.Wang, A.S. Schlachter, M.S. Lubell, and D.W. Lindle
Post-Collision Interaction Moderated Anion Formation Following Photofragmentation of CO

107. H.Wang, O. Hemmers, P. Focke, M.M. Sant'Anna, D. Lukic, M. Grush, I.A. Sellin, and D.W. Lindle
Observation of Non-Dipolar Effects of Xenon *4d* Photoelectrons in the Vicinity of Cooper Minimum

108. H. Wang, G. Snell, O. Hemmers, B. Langer, M.M. Sant'Anna, N. Berrah, and D.W. Lindle
Dipolar Angular Distributions and Branching Ratio of Xenon *4d* Photoelectrons in the Photon Energy Range of 100-250 eV

109. H. Wang, O. Hemmers, P. Focke, M.M. Sant'Anna, D. Lukic, C. Heske, R.C.C. Perera, I.A. Sellin, and D.W. Lindle
Non-Dipolar and Dipolar Angular Distribution of S *2s* and *2p* of SF₆ Core-Level Photoionization in the Vicinity of F *1s* Excitation

110. P.W. Langhoff, J.C. Arce, J.A. Sheehy, O. Hemmers, H. Wang, P. Focke, I.A. Sellin, and D.W. Lindle
On the angular distributions of electrons photoejected from fixed-in-space and randomly oriented molecules

2001 Annual Meeting of the Division of Atomic, Molecular, and Optical Physics (DAMOP), London, Ontario, Canada, May 16-19, 2001

111. O. Hemmers, S.T. Manson, M. Sant'Anna, P. Focke, H. Wang, I.A. Sellin, and D.W. Lindle
Relativistic effects on interchannel coupling in atomic photoionization: the photoelectron angular distribution of Xe *5s*

Twentysecond International Conference on the Physics of Electronic and Atomic Collisions (XXII. ICPEAC), Santa Fe, NM, USA, July 18-24, 2001

112. O. Hemmers, M. Lotrakul, G. Öhrwall, S.W. Yu, D. Lukic, I.A. Sellin, and D.W. Lindle

Large Nondipole Effects in the Core-Level Threshold Regions of Small Molecules

Berkeley Lab Center for Science and Engineering Education, Summer Student Poster Session, Berkeley, CA, USA, August 7, 2001

113. Monica Pangilinan, Sierra Laidman, Alfred Schlachter, Oliver Hemmers, Dennis Lindle, Gunnar Öhrwall, Sung Woo Yu, Renaud Guillemin, Wayne Stolte
Light at the End of the Tunnel (Exploring the Limitations of the Dipole Approximation)

114. Sierra Laidman, Monica Pangilinan, Alfred Schlachter, Oliver Hemmers, Dennis Lindle, Gunnar Öhrwall, Sung Woo Yu, Renaud Guillemin, Wayne Stolte
Let there be Light (Beamline 8.0.1 and a Time-of-Flight Apparatus)

The Thirteenth International Conference on Vacuum Ultraviolet Radiation Physics (VUV-13), Trieste, Italy, July 23-27, 2001

115. O. Hemmers, M. Lotrakul, G. Öhrwall, S.W. Yu, D. Lukic, I.A. Sellin, and D.W. Lindle
Large Nondipole Effects in the Core-Level Threshold Regions of small Molecules

116. G. Öhrwall, O. Hemmers, S.W. Yu, M. Lotrakul, D. Lukic, I.A. Sellin, and D.W. Lindle
Nondipole Effects in Core-Electron Photoemission Angular Distributions of small Molecules

VUV-13 Satellite Meeting "Decay Processes in Core-Excited Species" Rome, Italy, July 30 - Aug 2, 2001

117. G. Öhrwall, O. Hemmers, S.W. Yu, R. Guillemin, M. Lotrakul, D. Lukic, I.A. Sellin, and D.W. Lindle
Non-Dipole Effects in Atomic and Molecular Photoemission

Advanced Light Source Users' Association Annual Meeting, Berkeley, CA, October 15-17, 2001

118. O. Hemmers, M. Lotrakul, G. Öhrwall, S.W. Yu, D. Lukic, I.A. Sellin, and D.W. Lindle
Large Nondipole Effects in the Core-Level Threshold Regions of small Molecules

2002 Annual Meeting of the Division of Atomic, Molecular, and Optical Physics (DAMOP), Williamsburg, VA, USA, May 29-June 1, 2002

119. E.P. Kanter, B. Krässig, S.H. Southworth, R. Guillemin, O. Hemmers, D.W. Lindle, N.L.S. Martin, and R. Wehlitz
Dipole-forbidden Photoionization through the He $2p^2 \ ^1D_2$ Autoionizing Resonance

120. O. Hemmers, R. Guillemin, G. Öhrwall, M. Lotrakul, S.W. Yu, D.W. Lindle, P.C. Deshmukh, S.T. Manson, and I.A. Sellin: Relativistic Effects on Dipole and Nondipole Interchannel Coupling in Atomic Photoionization
The Photoelectron Angular Distributions of Xe $5s$ and $5p$

121. O. Hemmers, D.W. Lindle, M. Blackburn, T. Goddard, P. Glans, H. Wang, S.B. Whitfield, R. Wehlitz, and I.A. Sellin
First Separate Measurements of the Nondipole Parameters γ and δ : Showcase Neon $2p$ Photoemission

122. O. Hemmers, M. Lotrakul, G. Öhrwall, R. Guillemin, S.W. Yu, D.W. Lindle, D. Lukic, and I.A. Sellin
Large Nondipole Effects in the Core-Level Threshold Regions of Small Molecules

123. N.L.S. Martin, E.P. Kanter, B. Krässig, S.H. Southworth, R. Guillemin, O. Hemmers, D.W. Lindle, and R. Wehlitz
Resonant Non-Dipole Parameters for He $2\ell 2\ell'$ Autoionizing Resonances

124. R. Guillemin, O. Hemmers, D.W. Lindle, E. Shigemasa, K. Le Guen, D. Ceolin, C. Miron, N. Leclercq, P. Morin, M. Simon, and P.W. Langhoff
Non-Dipolar Electron Angular Distributions from Fixed-in-Space Molecules

**Symposium in Honor of C.E. Brion (85th Canadian Society for Chemistry Conference and Exhibition):
Electron and VUV Photon Impact Methods, Vancouver, British Columbia, Canada, June 4-5 2002**

125. D.W. Lindle, W.C. Stolte, O. Hemmers, G. Öhrwall, D.L. Hansen, L.T.N. Dang, M.M. Sant'Anna, A.S. Schlachter, I. Dominguez-Lopez, M.N. Piancastelli, and M. Lubell
Anionic Photofragmentation of Core-Excited Small Molecules

126. D.W. Lindle, O. Hemmers, M. Lotrakul, G. Öhrwall, R. Guillemin, S.W. Yu, D. Lukic, and I.A. Sellin
Nondipole Angular-Distribution Effects in Photoemission from Atoms and Molecules

Nineteenth International Conference on X-Ray and Inner-Shell Processes (X-02), Rome, Italy, June 24-28, 2002

127. O. Hemmers, D.W. Lindle, M. Blackburn, T. Goddard, P. Glans, H. Wang, S.B. Whitfield, R. Wehlitz, and I.A. Sellin
First Separate Measurements of the Nondipole Parameters γ and δ : Showcase Neon $2p$ Photoemission

128. O. Hemmers, M. Lotrakul, G. Öhrwall, R. Guillemin, S.W. Yu, D.W. Lindle, D. Lukic, and I.A. Sellin
Large Nondipole Effects in the Core-Level Threshold Regions of Small Molecules

129. R. Guillemin, O. Hemmers, D.W. Lindle, E. Shigemasa, K. Le Guen, D. Ceolin, C. Miron, N. Leclercq, P. Morin, M. Simon, and P.W. Langhoff
Non-Dipolar Electron Angular Distributions from Fixed-in-Space Molecules

International Workshop on Photoionization (IWP-02), SPring-8, Hyogo, Japan, August 22-26, 2002

130. O. Hemmers, R. Guillemin, G. Öhrwall, M. Lotrakul, S.W. Yu, D.W. Lindle, P.C. Deshmukh, S.T. Manson, and I.A. Sellin
Relativistic Effects on Dipole and Nondipole Interchannel Coupling in Atomic Photoionization: The Photoelectron Angular Distributions of Xe $5s$ and $5p$

131. O. Hemmers, D.W. Lindle, M. Blackburn, T. Goddard, P. Glans, H. Wang, S.B. Whitfield, R. Wehlitz, and I.A. Sellin
First Separate Measurements of the Nondipole Parameters γ and δ Showcase Neon $2p$ Photoemission

132. O. Hemmers, M. Lotrakul, G. Öhrwall, R. Guillemin, S.W. Yu, D.W. Lindle, D. Lukic, and I.A. Sellin
Large Nondipole Effects in the Core-Level Threshold Regions of Small Molecules

133. R. Guillemin, O. Hemmers, D.W. Lindle, E. Shigemasa, K. Le Guen, D. Ceolin, C. Miron, N. Leclercq, P. Morin, M. Simon, and P.W. Langhoff
Non-Dipolar Electron Angular Distributions from Fixed-in-Space Molecules

134. R. Guillemin, D. Rolles, S.W. Yu, O. Hemmers, and D.W. Lindle
Non-Dipolar Electron Angular Distributions from Nitrous Oxide

2003 Annual Meeting of the Division of Atomic, Molecular, and Optical Physics (DAMOP), Boulder, CO, USA, May 20-24, 2003

135. R. Guillemin, O. Hemmers, D.W. Lindle, H. Wang, W.C. Stolte, S.-W. Yu, A. Wolska, I. Tran, A. Hudson, J. Baker, D. Rolles
Nearest-neighbor-Atom Core-Hole Transfer effect: Interatomic core-to-core electron correlation in molecules

136. O. Hemmers, R. Guillemin, D.W. Lindle, J. Baker, A. Hudson, M. Lotrakul, W. Stolte, I.C. Tran, A. Wolska, S.-W. Yu, E.P. Kanter, B. Krässig, S.H. Southworth, R. Wehlitz, M.Ya. Amusia, L.V. Chernysheva, K.T. Cheng, W.R. Johnson, D. Rolles, S.T. Manson
Dramatic nondipole effects in low-energy photoionization: experimental and theoretical study of Xe 5s

Ninth International Conference on Electronic Spectroscopy & Structure (ICESS9), Uppsala, Sweden, June 30- July 4, 2003

137. O. Hemmers, R. Guillemin, E.P. Kanter, B. Krässig, D.W. Lindle, S.H. Southworth, R. Wehlitz, J. Baker, A. Hudson, M. Lotrakul, D. Rolles, W.C. Stolte, I.C. Tran, A. Wolska, S.-W. Yu, M. Ya Amusia, K.T. Cheng, L.V. Chernysheva, W.R. Johnson, S.T. Manson
Dramatic nondipole effects in low-energy photoionization: experimental and theoretical study of Xe 5s

138. R. Guillemin, O. Hemmers, D. Rolles, S.-W. Yu, A. Wolska, I. Tran, A. Hudson, J. Baker and D.W. Lindle
Nearest-neighbor-Atom Core-Hole Transfer: Interatomic core-to-core electron correlation in molecules

Twentythird International Conference on Photonic Electronic and Atomic Collisions (XXIII. ICPEAC), Stockholm, Sweden, July 23-29, 2003

139. O. Hemmers, R. Guillemin, D.W. Lindle, J. Baker, A. Hudson, M. Lotrakul, W. Stolte, I.C. Tran, A. Wolska, S.-W. Yu, E.P. Kanter, B. Krässig, S.H. Southworth, R. Wehlitz, M. Ya Amusia, L.V. Chernysheva, K.T. Cheng, W.R. Johnson, D. Rolles, S.T. Manson
Dramatic nondipole effects in low-energy photoionization: experimental and theoretical study of Xe 5s

140. D. Rolles, R. Guillemin, S.-W. Yu, O. Hemmers and D.W. Lindle
Giant nondipole effect due to intramolecular interchannel coupling in K-shell photoionization of Nitrous oxide

Advanced Light Source Users' Association Annual Meeting, LBNL, Berkeley, CA, October 6-8, 2003

141. O. Hemmers, R. Guillemin, D.W. Lindle, J. Baker, A. Hudson, M. Lotrakul, W. Stolte, I.C. Tran, A. Wolska, S.-W. Yu, E.P. Kanter, B. Krässig, S.H. Southworth, R. Wehlitz, M. Ya Amusia, L.V. Chernysheva, K.T. Cheng, W.R. Johnson, D. Rolles, S.T. Manson
Dramatic nondipole effects in low-energy photoionization: experimental and theoretical study of Xe 5s

142. R. Guillemin, O. Hemmers, D. Rolles, S.-W. Yu, A. Wolska, I. Tran, A. Hudson, J. Baker and D.W. Lindle
Nearest-neighbor-Atom Core-Hole Transfer: Interatomic core-to-core electron correlation in molecules

2004 ANS (American Nuclear Society) Student Conference, University of Wisconsin at Madison, WI, April 1-3, 2004

143. C.P. Rodrigo, G.W.C. Silva, O. Hemmers, D.L. Perry, and D.W. Lindle
Evaluation of Fluorapatite as a Waste Form

144. G.W.C. Silva, D.L. Perry, A.L. Johnson, O. Hemmers, and D.W. Lindle
Characterization of the thermal stability of Apatites containing different cations

Graduate and Professional Student Research Forum, University of Nevada, Las Vegas, April 17, 2004

145. G.W.C. Silva, D.L. Perry, A.L. Johnson, O. Hemmers, and D.W. Lindle
Characterization of the thermal stability of Apatites containing different cations

The 35th Annual Meeting of the Division of Atomic, Molecular and Optical Physics(DAMOP), Tucson, AZ, USA, May 25-29, 2004

146. O. Hemmers, R. Guillemin, A. Wolska, D.W. Lindle, D. Rolles, K.T. Cheng, W.R. Johnson, H.L. Zhou, S.T. Manson
Nondipole effects in the photoionization of Xe 4d: Evidence for quadrupole satellites

147. O. Hemmers, R. Guillemin, I. Bashta, A. Wolska, D.W. Lindle, D. Rolles, B. Krässig, E. Kanter, S. Southworth, R. Wehlitz, P. Langhoff, V. McKoy, B. Zimmermann
Nondipole effects in valence shell photoionization of nitrogen at low photon energies

148. A. Hudson, R. Guillemin, W.C. Stolte, O. Hemmers, D.W. Lindle
Polarized Cl K- α Emission from Freon 13

The Fourteenth International Conference on Vacuum Ultraviolet Radiation Physics (VUV-XIV), Cairns, Australia, July 19-23, 2004

149. O. Hemmers, R. Guillemin, A. Wolska, D.W. Lindle, D. Rolles, K.T. Cheng, W.R. Johnson, H.L. Zhou, and S.T. Manson
Nondipole effects in the photoionization of Xe 4d: Evidence for quadrupole satellites

150. O. Hemmers, R. Guillemin, A. Wolska, I. Bashta, D.W. Lindle, D. Rolles, B. Krässig, E. Kanter, S. Southworth, R. Wehlitz, P. Langhoff, V. McKoy, and B. Zimmermann
Nondipole effects in valence shell photoionization of nitrogen at low photon energies

151. R. Guillemin, O. Hemmers, D. Rolles, S.-W. Yu, A. Wolska, I. Tran, A. Hudson, J. Baker, and D.W. Lindle
Nearest-Neighbor-Atom Core-Hole Transfer in Isolated Molecules

152. A.C. Hudson, R. Guillemin, W.C. Stolte, O. Hemmers, and D.W. Lindle
Polarized Cl K- α Emission from Freon 13

Advanced Light Source Users' Association Annual Meeting, LBNL, Berkeley, CA, October 16-18, 2004

153. O. Hemmers, R. Guillemin, A. Wolska, D.W. Lindle, D. Rolles, K.T. Cheng, W.R. Johnson, H.L. Zhou, and S.T. Manson
Nondipole effects in the photoionization of Xe 4d: Evidence for quadrupole satellites

154. O. Hemmers, R. Guillemin, A. Wolska, I. Bashta, D.W. Lindle, D. Rolles, B. Krässig, E. Kanter, S. Southworth, R. Wehlitz, P. Langhoff, V. McKoy, and B. Zimmermann
Nondipole effects in valence shell photoionization of nitrogen at low photon energies

155. D. Rolles, R. Guillemin, O. Hemmers, S.-W. Yu, A. Wolska, and D.W. Lindle
Nearest-Neighbor-Atom Core-Hole Transfer in Isolated Molecules

156. A.C. Hudson, R. Guillemin, W.C. Stolte, O. Hemmers, and D.W. Lindle
Polarized Cl K- α Emission from Freon 13

American Nuclear Society (ANS) Student Conference, Columbus, OH, April 2005

157. G.W.C. Silva, O.A. Hemmers, and D.W. Lindle
Characterization of the Thermal Stability of Zinc-containing Fluorapatite

158. C.P. Rodrigo, O.A. Hemmers, and D.W. Lindle
Characterization of Fluorapatite as a Waste Form

Annual Meeting of the Division of Atomic, Molecular, and Optical Physics (DAMOP), Lincoln, Nebraska, May 2005

159. O. Hemmers, R. Guillemin, D. Rolles, A. Wolska, S.-W. Yu, D.W. Lindle, and S.T. Manson
Study of Spin-orbit-resolved Angular-Distribution Components of Xe $5p$

160. O.A. Hemmers, W.C. Stolte, R. Guillemin, D. Rolles, and D.W. Lindle
First Measurements of Macroscopic Drag Currents under the Action of Photon Flux

161. A. Hudson, W.C. Stolte, R. Guillemin, O.A. Hemmers, P.W. Langhoff, and D.W. Lindle
Cl K- α Resonant X-ray Raman Scattering from CF₃Cl

162. M. Simon, L. Journal, S. Carniato, R. Taieb, I. Minkov, F. Gel'mukhanov, H. Ågren, R. Guillemin, W.C. Stolte, A. Hudson, O.Hemmers, and D.W. Lindle
Cl K- α and Cl K- β Resonant X-ray Raman Emission from HCl

International Conference on X-Ray and Inner-Shell Processes (X-05), Melbourne, Australia, July 2005

163. A. Hudson, W.C. Stolte, R. Guillemin, O.A. Hemmers, P.W. Langhoff, J.D. Mills, and D.W. Lindle
Cl K- α Resonant X-ray Raman Scattering from CF₃Cl and CF₂Cl₂

International Workshop on Photoionization (IWP), Campinas, Brazil, July 2005

164. A. Hudson, W.C. Stolte, R. Guillemin, O.A. Hemmers, P.W. Langhoff, J.D. Mills, and D.W. Lindle
Cl K- α Resonant X-ray Raman Scattering from CF₃Cl and CF₂Cl₂

165. O.Hemmers, R. Guillemin, D. Rolles, A. Wolska, S.-W. Yu, D.W. Lindle, and S.T. Manson
Study of Spin-orbit-resolved Angular-Distribution Components of Xe $5p$

166. O.A. Hemmers, W.C. Stolte, R. Guillemin, D. Rolles, and D.W. Lindle
First Measurements of Macroscopic Drag Currents under the Action of Photon Flux

Advanced Light Source Annual Users' Meeting, Berkeley, CA, October 2005

167. A. Hudson, W.C. Stolte, R. Guillemin, O.A. Hemmers, P.W. Langhoff, J.D. Mills, and D.W. Lindle
Cl K- α Resonant X-ray Raman Scattering from CF₃Cl and CF₂Cl₂

168. O.Hemmers, R. Guillemin, D. Rolles, A. Wolska, S.-W. Yu, D.W. Lindle, and S.T. Manson
Study of Spin-orbit-resolved Angular-Distribution Components of Xe $5p$

169. O.A. Hemmers, W.C. Stolte, R. Guillemin, D. Rolles, and D.W. Lindle
First Measurements of Macroscopic Drag Currents under the Action of Photon Flux

Annual Meeting of the Division of Atomic, Molecular and Optical Physics (DAMOP), Knoxville, Tennessee, May 16-20, 2006

170. P.C. Deshmukh, O. Hemmers, R. Guillemin, A. Wolska, D.W. Lindle, D. Rolles, S.-W. Yu, and S.T. Manson
First Observation of a Quadrupole Cooper Minimum in the Photoionization of Xe $5p$

International Conference on Electronic Spectroscopy and Structure (ICESS10), Foz do Iguacu, PR, Brazil, August 28 - September 1, 2006

171. D. Céolin, M.N. Piancastelli, R. Guillemin, W.C. Stolte, S.-W. Yu, O. Hemmers, and D.W. Lindle
Fragmentation of methyl chloride studied by partial positive and negative ion yield spectroscopy

Advanced Light Source Annual Users' Meeting, Berkeley, CA, October 9-11, 2006

172. P.C. Deshmukh, O. Hemmers, R. Guillemin, A. Wolska, D.W. Lindle, D. Rolles, S.-W. Yu, and S.T. Manson
First Observation of a Quadrupole Cooper Minimum in the Photoionization of Xe 5p

173. D. Céolin, M.N. Piancastelli, R. Guillemin, W.C. Stolte, S.-W. Yu, O. Hemmers, and D.W. Lindle
Fragmentation of methyl chloride studied by partial positive and negative ion yield spectroscopy

UNLV Undergraduate Student Research Projects, August 9, 2007

174. K. Bowen, O. Hemmers, D.W. Lindle
The role of bond length in the nondipole effect in x-ray molecular photoionization

UNLV 2007 Inaugural Energy Symposium, Las Vegas, NV, August 15-17, 2007

175. O. Hemmers, K. Lipinska-Kalita, D. Lindle, I. Demchenko, and W.C. Stolte
Synchrotron X-Ray Spectroscopy Studies for H₂ Storage

176. O. Hemmers, K. Lipinska-Kalita, R. Kaushal, and C. Silva
Biofuels for Transport: Solving Issues with Condensed Matter Physics Tools

Pahrump Fall Festival, Pahrump, NV, October 4 – 7, 2007

177. O. Hemmers, K. Lipinska-Kalita, R. Kaushal, and C. Silva
Biofuels for Transport: Solving Issues with Condensed Matter Physics Tools

Advanced Light Source Annual Users' Meeting, Berkeley, CA, October 4-6, 2007

178. O. Hemmers, K. Lipinska-Kalita, D. Lindle, I. Demchenko, and W.C. Stolte
Synchrotron X-Ray Spectroscopy Studies for H₂ Storage

National Clean Energy Summit, Las Vegas, NV, August 19, 2008

179. O. Hemmers, C. Bae, and K. Lipinska-Kalita
New Technologies for Future Biodiesel Production

UNLV 2008 Renewable Energy Symposium, Las Vegas, NV, August 20, 2008

180. O. Hemmers, C. Bae, and K. Lipinska-Kalita
New Technologies for Future Biodiesel Production

Advanced Light Source Annual Users' Meeting, Berkeley, CA, October 13-15, 2008

181. I.N. Demchenko, Lawniczak-Jablonska, T. Tyliczszak, N.R. Birkner, W.C. Stolte, M. Chernyshova, and O. Hemmers
XANES studies of newly synthesized nanostructured manganese oxides

182. I.N. Demchenko, E. Piskorska-Hommel, D. Hommel, W.C. Stolte, and O. Hemmers
The local environment around In atoms in InGaN layers grown by MBE

The 14th International Conference on X-ray Absorption Fine Structure, Camerino, Italy, July 26-31, 2009

183. E. Piskorska-Hommel, I.N. Demchenko, T. Yamaguchi, W.C. Stolte, W. Yang, O. Hemmers
Polarization dependent studies of InGaN layers by means of XANES

Advanced Light Source Annual Users' Meeting, Berkeley, CA, October 15-17, 2009

184. I.N. Demchenko, M. Chernyshova, J.D. Denlinger, K.M. Yu, D. Speaks, P. Olalde-Velasco, O. Hemmers, W. Walukiewicz, A. Derkachova and K. Lawniczak-Jablonska
Full multiple scattering analysis of X-ray absorption near edge structure at the O K- and Cd L₃- edges in CdO thin layer combined with X-ray emission spectroscopy investigation

41st Annual Meeting of the Division of Atomic Molecular and Optical Physics, May 25-29, 2010, Houston, Texas

185. K.P. Bowen, W.C. Stolte, J.A. Young, I.N. Demchenko, R. Guillemin, O. Hemmers, M.N. Piancastelli, D.W. Lindle
Nondipole photoemission from chiral enantiomers of camphor

The 10th jubilee International School and Symposium on Synchrotron Radiation in Natural Science, Szklarska Poreba, Poland, June 6-11, 2010

186. I.N. Demchenko, T. Tyliszczak, M. Chernyshova, K.M. Yu, J.D. Denlinger, D. Speaks, P. Olalde-Velasco, O. Hemmers, W. Walukiewicz, G. Derkachov, and K. Lawniczak-Jablonska
Modification of the local structure of oxygen in CdO under irradiation

37th International Conference on Vacuum UltraViolet and X-ray Physics, University of British Columbia, Vancouver, BC, Canada, July 11 – 16, 2010

187. K.P. Bowen, W.C. Stolte, J.A. Young, I.N. Demchenko, R. Guillemin, O. Hemmers, M.N. Piancastelli, D.W. Lindle
Nondipole photoemission from chiral enantiomers of camphor

188. I.N. Demchenko, J.D. Denlinger, M. Chernyshova, K.M. Yu, D. Speaks, P. Olalde-Velasco, W.C. Stolte, O. Hemmers, W. Walukiewicz, A. Derachaova, K. Lawniczak-Jablonska
Electronic structure of CdO studied by soft X-ray spectroscopy

189. W.C. Stolte, I.N. Demchenko, O. Hemmers
Full multiple scattering analyses of XANES and X-ray emission studies of AgCl near the Cl K-edge

5th International Workshop on Mullite & Mullite-type Materials, Avilés, Spain, May 8th - 11th, 2011

190. P. Kalita, A. Cornelius, K. Lipinska, S. Sinogeikin, M. Lufaso, Z. Kann, O. Hemmers, and H. Schneider
Pressure Induced Phase Transitions in Mullite-Type Bi₂(Fe_{4-x}Mn_x)O_{10-x} Complex Oxides

2011 DOE Hydrogen Fuel Cells Program and Vehicle Technologies Program Annual Merit Review and Peer Evaluation Meeting, Arlington, VA, May 9-13, 2011

191. K. Lipinska and O. Hemmers
Glasses and Nanocomposites for Hydrogen Storage

2011 DOE Biomass Program Review Integrated Biorefineries Platform IBR & Infrastructure, Washington D.C. Feb. 1-3, 2011

192. K. Lipinska, O. Hemmers and S. Balagopal
Development of Biofuels Using Ionic Transfer Membranes – Phase II

APS March Meeting, Boston, MA, Feb, 28-March 2, 2012

193. P. Kalita, A. Cornelius, K. Lipinska, O. Hemmers, S. Sinogeikin, M. Murshed and T. Gesing
New Structural Phase Transitions in PbMBO₄ Complex Oxides

2012 DOE Hydrogen Fuel Cells Program and Vehicle Technologies Program Annual Merit Review and Peer Evaluation Meeting, Arlington, VA, May 9-13, 2012

194. K. Lipinska and O. Hemmers
Glasses and Nanocomposites for Hydrogen Storage

2013 DOE Bioenergy Technologies Office (BETO) Project Peer Review Technology Area Review: Biofuels, May 20-23, 2013

195. K. Lipinska, S. Balagopal, O. Hemmers, and C. Bae
Development of Biofuels Using Ionic Transfer Membranes Phase III

APS March Meeting, Baltimore, MD, March 18-22, 2013

196. P. Kalita, A. Cornelius, K. Lipinska, O. Hemmers, S. Sinogeikin, R. Fisher, H. Schneider
Mullite Ceramics at Extreme Conditions

In the Media

UNLV Security Studies, KNPR's State of Nevada, AIR DATE: November 13, 2008
<http://www.knpr.org/son/archive/detail2.cfm?SegmentID=4731>

Now that's green energy, Las Vegas Sun Tuesday, Feb. 24, 2009
<http://www.lasvegassun.com/news/2009/feb/24/now-s-green-energy/>

Algae Energy, KNPR's State of Nevada, AIR DATE: March 10, 2009
<http://www.knpr.org/son/archive/detail2.cfm?SegmentID=5093>

Biofuel, KNPR's State of Nevada, AIR DATE: April 9, 2010
<http://www.knpr.org/son/archive/detail2.cfm?SegmentID=6816>

Experts Call New Fuel Plant a Win-Win, Residents Not So Sure, Channel 8 Now – Las Vegas, Posted: Feb 05, 2014 5:44 PM PST
<http://www.8newsnow.com/story/24647463/experts-call-new-fuel-plant-a-win-win-residents-not-so-sure>

Meetings Attended

Invited to attend the SciTech Hookup event, held at the World Market Center on October 24, 2012.

8th Cyber Security and Information Intelligence Research Workshop, Oak Ridge National Laboratory, January 8 – 10, 2013.

Coalition of EPSCoR/IDeA States' Annual Meeting will take place in Washington, DC on March 11-12, 2013. Visit of the NNSS to explore the infrastructure that may be used in the extreme cyber test bed initiative, March 14, 2013.

Louisiana Tech University, Cyber Security Meeting (TMNL) in Ruston, LA, March 20, 2013
Attended the AUVSI's Unmanned Systems North America 2013 Conference August 12-15, 2013
Washington, D.C.

Invited to attend the SciTech Hookup event, held at the World Market Center on October 25, 2013.

Attended the 9th International Conference on Climate Change (ICCC-9) in Las Vegas, NV, July 7-9, 2014

Attended and Presented at the 14th International Conference on Climate Change (ICCC-14) in Las Vegas, NV, April 16-17, 2021

EXHIBIT D

EXHIBIT D

DECLARATION OF EXPERT G DONALD ALLEN

G DONALD ALLEN declares, under penalty of perjury, that the following is true and correct.

1. I am a Professor Emeritus in the Department of Mathematics at Texas A&M University and also an author of numerous works pertaining to mathematics, politics, as well as to government agencies, including classified work.
2. Prior to my retirement in 2017, I taught Mathematics at both the undergraduate and graduate levels for 46 years. I developed many graduate courses in problem-solving and related subjects. I developed the online masters program in mathematics, first in the USA, beginning in 2001, and various computer codes relating to numerical analysis.
3. I have published more than 80 research articles related to operator theory, functional analysis, mathematics education, nutronics, political systems, and some philosophy topics. I've also reviewed dozens of mathematical papers submitted for publication. As well, I've published books in linear algebra, history of mathematics, and calculus. In addition, prior to retirement I was a Principal Investigator (PI) or co-PI on more than \$10 million in grant funding.
4. I have reviewed, mathematically, the reports by Edward Solomon furnished to me which mathematically analyzes the June 14, 2022, Republican gubernatorial primary in Clark County, Nevada, as well as other races.

5. In my expert opinion, these reports demonstrate clear and convincing evidence that the election results analyzed in these reports were not produced by accurate counting of the votes cast, but were instead artificially contrived according to a predetermined plan or algorithm.
6. In the paragraphs below, we summarize the salient points of the report by Mr. Solomon, simplifying his notation, and clarifying how relatively simple it is to manipulate election outcomes using voting algorithms. Yet, the problem has two parts. The first is to establish the election is incorrect. However, the important component is to estimate what the vote total should be.
7. The basic configuration for Candidate A and Candidate B where there are only mail-in and election-day votes. Assume the proportion of the mail-in votes for Candidate A is h . Therefore the proportion of mail-in votes for Candidate B is $1 - h$. Actual vote totals can be computed by multiplying the total number of mail-in votes. Similarly, the proportion of election day votes for Candidate A is k and the proportion of election-day votes for Candidate B is $1 - k$. Again, the total votes for each is obtained by multiplying by the total number of election-day votes. Now let M be the number of mail-in ballots and K be the number of votes on election day. Then, the proportion of votes for Candidate A is

$$\frac{hM + kK}{M + K}$$

If voting has been algothmized by adjusting the proportion of k to a new proportion r the vote total will be the same but the net proportion can be made to whatever, say $r < 0.5$, it is only required to solve the equation

$$\frac{(1-h)M + (1-k)K}{M + K} = 1 - r$$

for k . This is done to favor Candidate B. A similar equation is to favor Candidate A. This new value is merely programmed to change votes to obtain the desired proportion.

Programming this is remarkably simple. Going into any election, if the mail-in data is known, and a good estimate of K is known, the equation has a unique solution. If accurate poll data is known, and it generally is, then all we need is M and we can use the poll estimates to reflect the proportions and then estimate what value k should be to obtain the desired proportion r to be programmed in.

All this is for just one voting station and literally could not be detected. However, if the same or similar proportion obtains over hundreds of precincts, then error is ascertained. That is, plotting the values of h and k of actual election results will reveal that k seems to be constant over all voting stations or precincts

8. If there is some control over the total number of mail-in ballots, say by supplementing mail-in ballots after the election-day ballots are counted, then both h and k can be manipulated, to a value where the equation above is solved for h to determine the number of ballots that need to be added. In the absence of both proportions, then poll numbers must be used to fix h and then estimate k based on the desired proportion r .
9. If all mail-in ballots total are known beforehand, and if algorithms are applied as above with differing values of k , massive evidence of error can be detected by noting the proportion of votes for Candidate B generally computes to the same total proportion over the spectrum of reporting stations.

10. In each of these cases, the algorithmic is clear and essentially proved. Please note that while a mathematical proof is desired, we are working with field data, and therefore must be replaced with statistical proof for example as applied to forensic psychology.
11. Another, more complex example of algorithmic error, is absolutely clear and convincing when the computed proportions between Candidates A and B do not add up to one. These values we never see, as all reported numbers are lumped together for presentation. Even in the case of newly discovered ballots, we often see total vote proportions change as the count is reported, though this is less indicative of error.
12. How to estimate the votes Candidate A would have if the algorithm flaws did not occur? For this, we use a statistical argument and assume the mail-in proportions, which are assumed to be known and correct are the same as the election-day voting proportions. Alternatively, we know an established relationship between the two. From this, we can back-project to what the values of k should have been for each precinct. These in turn can be averaged in a weighted scheme (by numbers of voters) to gain the average value of k . Using the standard deviation we estimate the range of all k values within two standard deviations and compute the expected vote count. In this way, the number of votes lost to Candidate A can be estimated. Alternatively, precinct by precinct poll numbers could be used, thus canceling the effects of mail-in voters that are known to behave in different ways from election day voters. Such are standard methods in statistical analysis. In this particular case, they apply to the Gilbert and Sheriff's election results. Solomon uses a geometrical argument, rotating actual results to assumed slope one expectations.

G. Donald Allen

G. Donald Allen

EXHIBIT E

EXHIBIT E

July 6, 2022

CURRICULUM VITA: G. Donald Allen

CURRENT OFFICE ADDRESS AND CONTACT POINTS

Professor of Mathematics
Department of Mathematics
Texas A&M University
College Station, Texas 77843-3368

Office: Room 221C Blocker Building
Phone 979/845-7950 (Office) 979/845-6028 (Fax)
Email: dallen@math.tamu.edu
Homepage: <http://www.math.tamu.edu/~dallen>

Current Home Address
9215 Brookwater Circle
College Station, Texas 77845

Citizenship: U.S.A.

Degree	Major	University	Year
	Mathematics	University of Wisconsin, Madison	1971
	Mathematics	University of Wisconsin, Milwaukee	1966
	Mathematics	University of Wisconsin, Milwaukee	1965

SERVICE: UNIVERSITY SERVICE AND COMMITTEES

- SYMCOMP2019 (PC member)
- 2015 Pearson Scholarship for Higher Education, Judge, July 2015
- Appointed to the Advisory Board, Global STEMx Education Conference, September 19-21, 2013. See, <http://stemxcon.com/page/2013-global-advisory-board>
- Appointed, Assessment and Effective Teaching 2013, Easy Chair Conferences, 2013-. Information Technology Working Group (ITWG), 2000- founding member.
- Co-director IT Lab, College of Science, 2001- present.
- Appointed, (Southwest Educational Research Association), Instruction, learning and cognition section, co Division Chair 2008-2009.
- Member, Teacher Quality Grants Instructional Leaders Community, 2007-2009.
- Consulting Editor, Thomson Higher Education, 2006-2007.
- Math TEKS Connections (MTC) - Geometry Advisory Board, funded through the TEA, 2006-2007. Chair, GK-12 Educational Outreach Institutionalization Committee, 2007 - 2010.
- Member, STEPS Management Team (College of Engineering), 2006 - 2008.
- Member, Camtasia Steering Committee, November 2005 - 2008.
- Member, Sigma Xi educational outreach committee, William Klemm, Chair, July 2005 - 2008.

- Member, Committee on Academic Freedom, Responsibility, and Tenure (CAFRT), Preliminary Screening Committee, Vice-Chair, 2005-2006.
- Member, Quality Enhancement Plan (QEP) Council, College of Science, 2004 - 2007.
- Member, President's Executive Committee Task Force for Enhancing the Undergraduate Experience, Jim Eddy, Chair, 2004 -2005.
- Grass Roots P-16 Consortium, (Statewide) 2005 - present.
- Regents Scholar Mentor program (11/29/2004 - 2007).
- Member, NSF PEER Distance Learning Community group, a component of the Partnership for Environmental Education and Rural Health, (See, http://peer.tamu.edu/DLC/NSF_Resources.asp), 2004 - 2008.
- Member, Regent Initiative, Academy for Educator Development Advisory Committee, TAMUS, 2004 -2005.
- Member, College of Science University Curriculum Committee, Sept 2004 - 2007.
- Member, College of Science Quality Enhancement Plan Council, (members: Dr. Michael Hall, Chemistry/Dean's Office (Chair) Dr. Vincent Cassone, Biology Dr. Donald Allen, Mathematics Dr. Lewis Ford, Physics Dr. Michael Speed, Statistics), 2004-2007.
- Member, Clinical Faculty Review Committee for TLAC (Department of Teaching Learning and Culture, College of Education), 2004-2005.
- Member, NSF G-K12 Fellows steering committee, (Larry Johnson, Dept of Vet Science, Chair), 2004-2009.
- Member, NSF G-K12 Fellows Recruiting and Selection Committee, (Vince Cassone, Dept of Biology, Chair), 2004 -2009.
- Member, Distance Education Review Committee, (Provost's office) F. Michael Speed, chair, 2003-2004.
- Co-director Information Technology (IT) Lab, College of Science, (2001-present)
- Member, Distance Education Coordinators in the Office of Distance Education, 2002 - 2005.
- Committee on Academic Freedom, Responsibility, and Tenure, (CAFRT) 2002-2005.
- Member, Computational Kinetics Theory Group, (Primary interest is in mathematical models and numerical solutions to the Transport Equation, particularly related to neutron kinetics and vehicular traffic flow modeling. The CKTG is headed by Dr. Paul Nelson who is affiliated with the Math, Computer Science, and Nuclear Engineering, Departments at Texas A&M University.) 1997 -2004.
- Office of Distance Education Faculty Advisory Committee, (2002 -)
- Committee on Academic Freedom, Responsibility, and Tenure, (CAFRT) 2002-2005
- Faculty Search Committee, Department of Teaching, Learning, and Culture, 2002
- Reviewer for Distance Education RPF for online course development (Oct/Nov 2001)
- APC Faculty Workstation Committee (TAMU), 2001- (Pierce Cantrell, Chair)
- AdHoc Committee on Intellectual Property, 2000. (C. Roland Haden, Chair)
- Faculty Workstation Committee (TAMU), 2001 - 2005 .
- Texas A&M University ad hoc Intellectual Property Committee (TAMU), 2000-2001.
- University Laboratory Renovation Committee (TAMU), (William Perry, chair),1999- 2001.
- Member, Faculty Senate 1999-. Academic Affairs Committee 1999-2000.
- Member, Faculty Senate 1985-1987, 1999-2002. Chair, Personnel and Welfare Committee 1986-87.
- Faculty Senate, 1999-2002.

- Member, Faculty Senate 1999-. Academic Affairs Committee 1999-.
- Faculty Senate, 1999-2002.
- Faculty Advisory Council, College of Science, vice-chair (1997-98) chair (1998-1999), 1996-1999.
- Mentors, 1990-current.
- Mentors Executive Committee, 1996-1997, an oversight group for the welfare of student life, Texas A&M University, 1990-1998.
- University recruiting representative to University of Minnesota, Carleton University, St. Olaf's College, Oct. 25-27, 1988.
- College of Science Faculty Advisory Committee, 1983-1985.
- University Faculty Advisory Committee, 1978.

DEPARTMENTAL SERVICE AND COMMITTEES:

- Associate Department Head for Operations: from 1981-1983 and 1992-1994, 2006 -2011.
Duties include:
 - o Scheduling and assigning courses
 - o Supervising over twenty-five lecturers
 - o Liaison with students
 - o Administering complaint issues
 - o Attending Executive Committee meetings
 - o Liaison with other administrative units
 - o Curriculum development
 - o General administrative duties
 - o Administering IEEF (Institutional Enhancement Equipment Fee) funds
- Executive Committee, 1994-1995, 1997-1999, 2006-2011.
- Honors Committee, 2005 - 2012.
- Undergraduate Studies Committee, 2006 - 2011.
- Texas Math Talent Search, (Peter Kuchment, chair), 2004-2010.
- Undergraduate Studies Committee, (2004 - 2008), Chair.
- Scholarship Committee (2004-2008), Chair.
- Undergraduate Recruiting Committee, 2004.
- Graduate Studies Committee (2003-2004). Teaching Evaluation Committee, 2002-2003.
- Committee to develop an undergraduate mathematics major with an Information Technology specialty, 2002.
- Promotion & Tenure policy review committee, 2001, Chair.
- Information Technology Working Group, founding member, 1999 - .
- Department of Mathematics, Executive Committee, 1999 - 2001
- Undergraduate Committee, Department of Mathematics, 1996 – 2000.
- Chair, Faculty Advisory Council, College of Science, 1998-1999, Chair 1999
- Member, Faculty Advisory Council, College of Science, 1996-1998.
- Member, Undergraduate Studies Committee, 1996-1999.
- Member, Subcommittee P, Department of Mathematics, 1992.

- Chair, Committee on Computer Software, Department of Mathematics, 1992.
- Chair, Committee on Space, Department of Mathematics, 1992.
- Committee on Academic Freedom, Tenure and Responsibility, 1991-1993, TAMU.
- Course Coordinator of Math 151, Math 152, Math 142, and other for various years.
- Department Head Search Committee, Department of Mathematics 1983.
- Graduate Studies Committee, 2002-2004.
- Undergraduate Studies Committee, 1998-2002.
- Undergraduate Advisor 1986-1992.
- Library Committee, 1971-1976.
- Promotion and Tenure Committee, 1975-1978.
- Colloquium Committee, 1976-1977.

OTHER SERVICE AND COMMITTEES

- Executive Steering Committee - ICTCM (International Conference on Technology in Collegiate Mathematics) 2000 - present.
- Grass Roots P-16 Consortium, (Statewide) 2005 - present.
- Member, Teacher Quality Grants Instructional Leaders Community, 2007-2010.
- Consulting Editor, Thomson Higher Education, 2006-2007.
- Math TEKS Connections (MTC) - Geometry Advisory Board, funded through the TEA, 2006-2007.
- Member, Assessment Strand Speakers Committee, ICTCM, 2005 - 2006.
- Chair, Review Committee for Nicholls State University, appointed by the State of Louisiana Board of Regents, June 8-12, 2003.
- Co-chair. Multimedia Speakers Committee, ICTCM, Oct 30, 2001- Nov2, 2003.
- Regent's Initiative, Academy for Educator Development, member. 2002 - 2006.
- Strategic Planning Process, a district planning project of the College Station Independent School District, 1998-1999.
- Urban Systemic Initiative, Coalition of 8 ISD's in San Antonio. Pre-grant preparation. (Amount requested, \$15M.) September 1994-August 1995.
- Judge, Brazos Valley Regional Science Fair, March 1996-2001, College Station Team Projects, Chair.
- Judge, Regional Science Bowl, at Texas A&M University, February, 1998-2000. Judge, Department of Energy Science Bowl, 1998, College Station, TX.
- Participant in the Conservation and Sustainable Development Initiative, Futurescapes II, TAMU April 13-14, 1989.
- Judge, Brazos Valley Regional Science and Engineering Fair, 1989-1999.
- Judge for the National Council of Teachers of Mathematics at the Brazos Valley Regional Science and Engineering Fair, 1991-1993.
- Participant in the Academic Administrator and Development Seminar, Texas A&M University, April 19-21, 1993.

IN THE PROFESSION - PART I

- 2006-2011, Associate Head, Department of Mathematics
- 1995- Professor, Texas A&M University

- 1994-1995 Associate Dean, University of Texas---San Antonio, Texas (on leave)
- 1992-1994 Associate Head for Operations, Mathematics, Texas A&M
- 1988- Professor of Mathematics, Texas A&M.
- 1981-83 Associate Head, Mathematics, Texas A&M
- 1976-88 Associate Professor of Mathematics, Texas A&M.
- 1974 ONR Research Support Contract N0014-680A-0303-0003(Summer) R.E. Schapery, P.I.
- 1973 NSF Research Support, Contract GP 38486. College (Summer) of Science (TAMU) Research support.
- 1972 Research Support, Texas A&M University. (Summer)
- 1971-76 Assistant Professor, Department of Mathematics, Texas A&M University, College Station, Texas.

IN THE PROFESSION – PART II

- Editorial Board, MDPI journals, Basil, Switzerland, 2020-.
- Editorial Board, Journal of Contemporary Mathematics, 2019-
- Editorial Board-Mathematics and Humanities Engineering, 2018 -
- Editorial Board, SAS Journals 2019 -
- Editorial Board, Journal of Advances in Sports and Physical Education, 2016
- Editorial Board, International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC), 2017-
- Editorial Board, Austin Mathematics 2014-
- Editorial Board, Advanced Emergency Medicine, 2017-.
- Associate Editor, School Science and Mathematics Journal, 2005-2009
- Associate Editor, Focus on Mathematics Pedagogy and Content - a newsletter for math teachers,
- Youtube.com channel on Numerical Analysis, 2012-.
- Editor, *The Math/Science-Online Newsletter* 1999 – 2004.
- Associate Editor (Reviews) College Mathematics Journal, 1999-2005
- Associate Editor, Transport Theory and Statistical physics, 1990-1997.
- Member, Computational Kinetics Theory Group, (Primary interest is in mathematical models and numerical solutions to the Transport Equation, particularly related to neutron kinetics and vehicular traffic flow modeling. The CKTG is headed by Dr. Paul Nelson who is affiliated with the Math, Computer Science, and Nuclear Engineering, Departments at Texas A&M University.) 1997 -2003
- Member, Society for Industrial and Applied Mathematics
- Associate Member, Center for Approximation Theory, Texas A&M, 2002-2008.
- Editor, *The Math/Science-Online Newsletter*
- Editorial Review Board for AACE/SITE Journal
- Member, Mathematical Association of America
- Referee for numerous journals.
 - a) Asian Research Journal of Mathematics (ARJM)
 - b) Athens Journal of Sciences (AJS)
 - c) Academia Letters

- d) Science & Education
- e) Journal School Science and Mathematics
- f) College Mathematics Journal
- g) The Texas Journal of Science
- h) Mathematical Modeling and Analysis Science and Education
- i) School Science and Mathematics
- j) Journal of STEM Education
- k) Transport Theory and Statistical Physics
- l) Journal of Mathematical Sociology
- m) Discrete and Continuous Dynamical Systems and Differential Equations
- n) SIAM J. Math. Anal.
- o) Athens Journal of Education
- p) SOAOJ, Mathematics and Humanities Engineering Open Access Open Journal (MHEOAOJ)
- q) SYMCOMP2019 (PC member, reviewer)

CONSULTING

1. Reviewer for UConn SPARK Technology Commercialization Fund, 2019
2. MTC geometry grant, 2007 (TEA Award number is 050245247110001).
3. WebALT (Web Alternative Learning Technologies), 2006- 2010.
4. Thomson Higher Education, Consulting Editor, 2006-2008.
5. Department of Mathematics, University of Idaho, online calculus project, funded through a Congressional earmark. June 13-20, 2005
6. TAMUS/Teacher Education Agency on professional development materials, 2004-2005.
7. Wiley (2003-2004) Q&A work for Boyce-DiPrima, Ordinary Differential Equations
8. LSU - Eunice, LA, SACS (Southern Association of Colleges and Schools) pre accreditation consultation team, March 29-31, 2004. Aerospace Academy for Engineering and Teacher Education, an education-industry-government collaboration, <http://www.aerospaceacademy.org/index-ie.html>. 2002-2003
9. Bowling Green University (2002) - Creating an online masters degree
10. University of Houston (2001-2002)- Putting mathematics courses online; developing an online masters program.
11. Addison-Wesley-Longman, 1999 - 2002.

RECENT GRANTS

1. Texas Higher Education Coordinating Board (THECB), Algebra, ~\$98,000, 2012-2014. *Investigations in Secondary Mathematics and Science*. Co-PI with Nite, S. B.
2. Texas Higher Education Coordinating Board (THECB), Algebra, ~\$98,000, 2012-2014. *Investigations in Secondary Mathematics and Science*. Co-PI with Nite, S. B., Texas Higher Education Coordinating Board, Funded \$589,000, 2/1/2014 - 4/30/2016
3. Halliburton Corporation, Mathematics All Around Us: Oil and Gas Applications, \$27,716, 2011-2012
4. Developmental Education Demonstration Project Evaluation 2011-2012: Co-Pi with Jim Dyer, M. M. Capraro. Awarded April, 2011 to Texas Higher Education Coordinating Board, Awarded \$399,998, co-Investigator, 6/10/11 – 10/31/12.
5. National Science Foundation (NSF), Preservice Teacher Effectiveness for Algebra I, Gerald

- Kulm, PI, September 1, 2010 - August 31, 2015, \$1,778,741, co-PI.
6. National Science Foundation (NSF), Retention through Remediation in PreCalculus, \$1,980,712, STEP Proposal # 0856767, June 15, 2009 - June 14, 2014, PI.
 7. West Sabine Independent School District, Mathematical Instructional Coaches Pilot Program (TEA - Texas Education Agency) - West Sabine ISD, \$26,125, 4/1/2009-5/31/2011, amended to \$28,125 on April 11, 2011, PI.
 8. Gladewater Independent School District, Mathematical Instructional Coaches Pilot Program, \$42,000, PI.
 9. Texas Education Agency (TEA), Professional Development Activities for Teachers and Administrators: Mathematics College and Career Readiness Standards, TEA Funding Source #10450967, TAMU-RF #0902074, \$500,000, August 14, 2009 - February 28, 2011.
 10. Texas Higher Education Coordinating Board (THECB), Design & Pilot of Framework & Tools for CCRS/ Texas Educator Preparation Demonstration Sites, \$500,000, September 1, 2009 - August 31, 2010 (Proposal 09-1202 "TAMU Educator Preparation Collaborative for Enhancing College and Career Readiness in Texas").
 11. Texas Higher Education Coordinating Board (THECB), Algebra I-II Focus on Alignment, Total Award Amt: \$190,000, May 1, 2009 - May 31, 2011, supplement of \$28,900 awarded on 5/4/2010. Total \$218,900. PI
 12. Texas Education Agency via El Paso Independent School District, Math Coachers Service provider contract, \$56,600, November 25, 2008- May 31, 2010, PI.
 13. NSF: "Continuing GK-12 Fellows Integrate Science/Math in Rural Middle Schools," PI and Co-PIs: Larry Johnson, James Kracht, W. R. Klemm, G. Donald Allen, Rajesh Miranda, and James Lindner. \$1,547,601, Award No. DGE-0638738, Proposal No. DGE-0638738, February 1, 2007 and expires January 31, 2010.
 14. THECB/Dana Center, Teacher Quality Grant - Algebra I, TAMU Account 02-421104 \$84,990, May 1, 2008 - May 31, 2009, PI.
 15. THECB/Dana Center, Teacher Quality Grant - Algebra I, TAMU Account 02-421104 \$76,000, May 1, 2008 - May 31, 2009, PI.
 16. THECB/Dana Center, Teacher Quality Grant - Algebra II, TAMU Account 02-421104 \$77,000, May 1, 2008 - May 31, 2009, PI.
 17. THECB (Texas Higher Education Coordinating Board): "Course Redesign for Math 1324," PI and director: G. Donald Allen, \$349,827, July 20, 2007 - August 31, 2009, TAMRF #0701594.
 18. THECB (Texas Higher Education Coordinating Board): "Course Redesign for Math 1324," PI and director: G. Donald Allen, \$349,827, July 20, 2007 - August 31, 2009, TAMRF #0701594.
 19. National Science Foundation Award No. DUE-0336591 Title: "Retention Through an Applied Physics, Engineering, and Mathematics (PEM) Model" Award Amount: \$1,999,999.00 PI and Current Co-PI's: Drs. Jo W. Howze, Arun R. Srinivasa, Michael S. Pilant, Timothy P. Scott, and William H. Bassichis Funding Period: 9/15/2003 - 8/31/2008, co-PI.
 20. National Science Foundation, ITEST grant, National Middles School Aerospace Scholars. (NaMAS), evaluator. Sharon Sledge, PI, Award No. ESI-0422698, \$1,193,506, January 1, 2005 - August 31, 2008, evaluator.
 21. Texas Education Agency (TEA), Math Coaches Program, Approved Service Provider for the Mathematics Instructional Coaches Pilot Program, in response to RFP 701-08-021 / RFP

- 701-08-040, 2008-09.
22. THECB: "High Quality Algebra II Instruction," \$88,197, June 1, 2007 - August 31, 2008.
 23. TEA, 21st Century Community Learning Centers Program, Department of Education through the Texas Education Agency, with Covington ISD, \$200,000, June 1, 2006 - May 31, 2008.
 24. MTA/MTC - Math TEKS Awareness, Texas Education Agency through the TAMU College of Education, Sept 1, 2005 - June 30, 2007, co-Investigator, (three months salary), co-Investigator.
 25. THECB/Dana Center, Teacher Quality Grant, Algebra II, TAMU Account 02-421104 \$84,990, May 1, 2006 - May 31, 2007.
 26. Texas Education Agency (TEA RFP 701-05-006 - Grant#056944087110059), Improving student Achievement through Professional Development, \$143,839, August 15, 2005-September 30, 2006, PI's G. Donald Allen, Cathy Ezrailson.
 27. Texas Education Agency (TEA RFP 701-05-006) - Snook, \$100,500, August 31, 2005, September 30, 2006.
 28. Texas Education Agency (TEA RFP 701-05-006) - Pasadena, TOOLS - The Teaching of Ongoing Learning Strategies, \$150,000, August 31, 2005, September 30, 2006, co-PI.
 29. Texas Education Agency (TEA RFP 701-05-006) - Mathis ISD, \$150,000, August 31, 2005, September 30, 2006, co-PI.
 30. P-16 Educational Improvement Consortium (PEIC) program, a Texas Education Agency funded program administered through the College of Education and the Department of Teaching Learning and Culture. TAMU, \$12,388, July 1-July 31, 2005.
 31. Office of Distance Education, TAMU, The Computational Masters Degree, July 20, 2005 - July 19, 2007, \$150,000.
 32. Texas Higher Education Teacher Quality Grant -Type B, "Assuring excellence in algebra II instruction," June 1, 2005 - August 31, 2006, co-PI's G. Donald Allen, \$81,687.
 33. Texas Higher Education Teacher Quality Grant -Type B, "Assuring excellence in middle school mathematics instruction," June 1, 2005 - August 31, 2006, co-PI's G. Donald Allen, and Dianne Goldsby, \$81,500.
 34. Texas Higher Education Teacher Quality Grant -Type B, "Assuring excellence in pre-calculus instruction," August 1, 2004 - January 31, 2006, co-PI's G. Donald Allen and Dianne Goldsby, \$79,993.
 35. Star Schools Project - Math Star Extension Grant to Los Angeles County Office of Education, US Department of Education, 84-203F, Donald Lake and Edna Murphy, co-directors, \$9.221m, June 15, 2004 - June 15, 2007; portion funding to Texas A&M with collaborators G. Donald Allen and Deborah Jolly, \$154,000.
 36. Texas Higher Education Teacher Quality Grant -Type B, "Pre-Calculus," March 12, 2004 - July 31, 2005, co-PI's G. Donald Allen and Sharon Sledge, \$80,000.
 37. Texas Higher Education Teacher Quality Grant -Type A, "Pre-Calculus - Practices of Good Teaching through Content, Technology, and Interaction," January 9, 2004 - January 31, 2005, PI's G. Donald Allen and Michael Pilant, \$295,391.
 38. NSF: "Fellows Integrate Science/Math in Rural Middle Schools," PI and Co-PIs: Larry Johnson, James Kracht, W. R. Klemm, Vincent Cassone, Rajesh Miranda, and James Lindner. \$1,210,000, January 1, 2004 - December 31, 2006. (I am co-Investigator on this award.)
 39. Collaborative Research Grants: Project Year 5, Online assessment for teachers, Texas A&M University System, \$18,630, 2003-2004, co-PIs, G. Donald Allen and Dianne Goldsby.

40. Quality Enhancement Program, Making assessment a part of the curriculum, Texas A&M University, \$6,500. 2003-04.
41. Regents' Initiative for Excellence in Education. Collaborative Research project. "Group Perceptions of Pre-service and In-service Teachers, College/University Faculty and Administrators on Math/Science Teacher Preparation", with Larry Kelly, Dianne Goldsby, and Dawn Parker, 2003-04, \$8,000.
42. Math/Physics Modeling Team Project. Funded through the Information Technology Center. January 10, 2001 - December 31, 2002, \$80,000. (Joint with Raytcho Lazarov and Joseph Pasciak.)
43. Texas A&M University, "Advanced Technology Mediated Instructional Laboratory", January 1, 2001, \$20,000, with Michael Pilant.
44. Texas A&M University, "Masters in Mathematics Education Using Distance Learning Protocols", September 1, 1999 to August 31, 2001, \$150,000.
45. Texas A&M University System, Regents' Initiative for Excellence in Education. Collaborative Research project. "Group Perceptions of Pre-service and In-service Teachers, College/University Faculty and Administrators on Math/Science Teacher Preparation", with Larry Kelly, Dianne Goldsby, and Dawn Parker, 2003, \$8,000.
46. Texas A&M University, "Advanced Technology Mediated Instructional Laboratory", January 1, 2001, \$20,000, with Michael Pilant. National Science Foundation: "Workshop on the efficacy of Maple in the Classroom", part of a contract with SRI, \$135,000, April, 1998. (Joint with David Sanchez, Math)
47. Electronic and Learning Incentives Program, sponsored by the Academy for Advanced Telecommunications and Learning Technologies, TAMU. \$5,000. July 1, 1997-Dec 31, 1997.
48. National Science Foundation: "Novel Methods for the solution of the transport equation", September 1, 1994 to August 31, 1998, \$315,000. CCR-9302782 (joint with Paul Nelson and Marvin Adams)
49. Electronic and Learning Incentives Program, sponsored by the Academy for Advanced Telecommunications and Learning Technologies, TAMU. \$5,000. July 1, 1997-Dec 31, 1997.
50. National Science Foundation, Second Texas-Mexico Workshop on Numerical Particle Transport, 1992, \$7,000, with Paul Nelson.
51. Development of Numerical Techniques to Measure Migration of Radio nuclides Through Porous Materials. Cray Research, Inc, 1992-1993.
52. Texas Advanced Research Program, Studies of the Transport Equation: An International Effort, \$58,609, 1990-1992.
53. National Science Foundation: "Third Texas-Mexico Workshop on Numerical Particle Transport", May 1, 1995 to April 30, 1996, \$7,943.
54. DOD/D of AF/AFSC, System Impact of Hit Assessment for NPB (Neutral Particle Beam) Discrimination, \$50,000, 1990-1991.

PUBLICATIONS - PAPERS PUBLISHED

- 1) G.D. Allen, "On embedding set functions into covariance functions" Trans. AMS, 179 (1973) 23-33.
- 2) G.D. Allen, "Extensions of Kolmogorov's Theorem for continuous covariances", Proc. AMS, Vol. 39 (1973) 214-216.

- 3) G.D. Allen and S. Cambanis, "Some remarks on Kolmogorov's Theorem" Proc. of the Symposium on Vector Valued Measures (1972) Academic Press.
- 4) G.D. Allen, C.K. Chui, W.R. Madych, F.J. Narcowich and P.W. Smith, "Pade Approximation and orthogonal polynomials", Bull. Austral. Math Soc. 10 (1974) 263-271.
- 5) G.D. Allen, "Pade approximation and Gaussian quadrature" Bull. Austral. Math. Soc. 11 (1974) 63-71.
- 6) G.D. Allen "Pade approximation of Stieltjes Series" J. Approx. Theory, 14 (1975) 302-316.
- 7) G.D. Allen, "On the multiplicity and spectral type of class of stochastic processes", SIAM J. of Appl. Math., 29 (1975).
- 8) G.D. Allen and F.J. Narcowich, "On the representation and approximation of a class of operator-valued analytic functions", Bull. AMS 81 (1975) 410-413.
- 9) G.D. Allen, "Convergence of the diagonal operator-valued Pade approximants to the Dyson expansion", Comm. Math. Phys. 45 (1975) 153-157.
- 10) G.D. Allen "On the structure of certain bounded linear operators" Proc. AMS, 53 (1975) 404.
- 11) G.D. Allen, F.J. Narcowich and J.P. Williams, "An operator version of a theorem of Kolmogorov" Pac. J. of Math., 61 (1975) 305-312.
- 12) G.D. Allen and F.J. Narcowich, "R-Operators. A representation theory and applications", Indiana J. of Math. 25 (1976) 945-963.
- 13) G.D. Allen and G.S. Brockway, "On the mechanical constitution of damageable materials", J. of Eng. Scie., to appear.
- 14) G.D. Allen and L.C. Shen, "On the structure of principal ideals of operators", Trans. of AMS, 238 (1978) 253-270.
- 15) G.D. Allen and J.D. Ward, "Hermitian liftings of $B\mathcal{O}_p$ " J. of Operator Theory 1 (1979).
- 16) G.D. Allen, "Duals of Lorentz Spaces", Pac. J. Math. 77 (1978) 287-291.
- 17) G.D. Allen and J.D. Ward, "A Simultaneous lifting theorem in Hilbert spaces", Trans AMS 250 (1980), 379-387.
- 18) G.D. Allen, D.A. Legg, J.D. Ward, Hermitian Liftings in Orlicz Sequence Spaces, Pac. J. Math. 86 (1980) 379-387.
- 19) G.D. Allen and J.D. Ward, Hermitian lifting in $B\mathcal{O}_p$, Proc. AMS 80 (1980) 71-77.
- 20) G.D. Allen, Locally Continuous Operators in **Prediction Theory and Harmonic Analysis**, V. Mandrekar and H. Salehi, Editors, North Holland, 1984.
- 21) Locally Continuous Operators II, Indiana U. Math. Journal, 38 (1989) 711-743.
- 22) Similarity Theory for Nest Algebras on L_p , with D.R. Larson, J.D. Ward and G. Woodward, J. of Functional Analysis, 92 (1990) 49-76.
- 23) Power Majorization and Majorization of Sequences, Results in Mathematics, 12 (1988) 211-222.
- 24) G.D. Allen, K.T. Andrews, and J.D. Ward, A Note on the Similarity of L_p nests, Acta Mathematica Hungarica, to appear.
- 25) G.D. Allen, C.K. Chui & W.L. Perry, 2nd Ed. Elements of Calculus, Brooks/Cole Publishing Co. 1989, Monterey, California.
- 26) G.D. Allen and Paul Nelson, On Generalized Finite Difference Methods for Approximation Solutions to Integral Equations, in **Advances in Numerical Partial Differential Equations and Optimization**, Proceedings of the Fifth Mexico-United States Workshop on Numerical Analysis, SIAM, 1991, pp. 112-140.

- 27) G. D. Allen and Paul Nelson, Convergence of Inner Iterations for Closed LOF Methods, submitted, SIAM J. of Numerical Analysis.
- 28) G. D. Allen, Toward a Dynamics for Power and Control in Society, *Journal of Mathematical Sociology*, 22 (1992) pp. 1-38.
- 29) G. D. Allen and W. W. Pitt, Monolithic Waste Forms---An Underrated and Under-Utilized Technology, Proceedings of the Symposium on Waste Management, Tuscon AZ, March 2-6, 1992, American Nuclear Society, 1992.
- 30) G. D. Allen and W. W. Pitt, Accounting for Boundary Layer Effects in the Modeling of Leaching from Monolithic Waste Forms, Proceedings of the Second Interagency Symposium on Stabilization of Soils and Other Materials, Metairie, LA., November 2-5, 1992, U. S. Corps of Army Engineers, 1992, pp.6:3-12.
- 31) G. D. Allen, Smoothness and super convergence for approximate solutions to the one dimensional monoenergetic transport equation, in *Advances in Numerical Partial Differential Equations and Optimization*, Proceedings of the Sixth Mexico-United States Workshop on Numerical Analysis, Kluwer Academic Publishers, 1993 pp. 1-14.
- 32) G. D. Allen, Dapeng Xin, and Dan G. Zollinger, A method to determine moisture diffusivity in concrete from measured moisture profiles, *Advanced Cement Based Material*, 2, (1995), 34-39.
- 33) G. D. Allen, Dynamic Models for Competitive-Cooperative Species, *Proceedings of the International Conference on Dynamical Systems and Differential Equations*, 1997, 1-20.
- 34) G. D. Allen, A hierarchical model for power systems. Stability, *J. Math. Soc.*, to appear.
- 35) G. D. Allen, The Web-Based Mathematics Course, a survey of the required features for an on-line math course and experiences in teaching one, *Syllabus Magazine*, with M. Stecher and P. Yasskin, Nov/Dec 1998.
- 36) G. D. Allen, WebCalC I, a description of the WebCalC project, it's history and features, to appear in the Proceeding of the ICTCM Conference, Nov 1998, Addison-Wesley-Longman, Reading. with M. Stecher and P. Yasskin.
- 37) G. D. Allen, Internet Based Drills and Quizzes, techniques for constructing math drills in subjects from algebra to calculus, to appear in the Proceeding of the ICTCM Conference, Nov 1998, Addison-Wesley-Longman, Reading. with M. Stecher and P. Yasskin.
- 38) G. D. Allen, Jeff Morgan and Sayed El Attar, Asymptotically short term behavior of solutions to one dimensional diffusion processes, with Jeff Morgan and Sayed El Attar, *Journal of Analysis and Applications*, 240 (1999) 145-162.
- 39) G. D. Allen, David Sanchez, Jim Herod, Mark Holmes, Vince Ervin, Robert Lopez, Joe Marlin, Strategies and Guidelines for Using a Computer Algebra System in the Classroom, with David Sanchez, et.Al., to appear, *International Journal of Engineering Education*, 15, no. 6, 1999, pp. 411-416.
- 40) G. D. Allen and Paul Nelson, Linear One-Cell Functional Methods for the Two Dimensional Transport Equation. Part I. The Nodal Formulation, *Ann. Nucl. Sci. and Eng.* (25 pages)
- 41) G. D. Allen, WebCalC --- Two Years Later, *Computers in Schools*, 17, p17-30, 2001.
- 42) Online Choices for Online Courses. A survey of the issues of developing an online course. Included is a discussion of various development products. To appear in the Proceedings of the 13th ICTCM Conference, Atlanta GA. November 16, 2000. URL: [://www.math.tamu.edu/webcalc/allen/onlinechoices121100.htm](http://www.math.tamu.edu/webcalc/allen/onlinechoices121100.htm)
- 43) G. D. Allen, The Distance Education Degree Program for The Master of Mathematics with a Teaching Option at Texas A&M University, Proceedings of the AACE Conference: SITE

- 2001--Society for Information Technology and Teacher Education International Conference, Orlando, Florida; March 5-10, 2001 with M. Pilant.
- 44) G. D. Allen, Online Calculus, in Using Information Technology in Mathematics Education, D. James Tooke, Norma Henderson, Eds., Haworth Press, New York, 2001.
 - 45) Online Calculus, The Course and Survey Results, Computers in the Schools, 17, p.17-30, 2001.
 - 46) G. D. Allen, Michael Pilant and Jon Pitts, On building a quality masters degree program, Proceedings of the 2003 DEC (Distance Education Conference) conference, January 21-24, 2003.
 - 47) G. D. Allen, C. Ezrailson and C. Loving, Analyzing Dynamic Pendulum Motion in an Interactive Online Environment Using Flash, Science and Education Journal Special Issues, to appear 2004.
 - 48) G. D. Allen, Making Animations, to appear, to appear in the Proceeding of the 15th ICTCM Conference, Baltimore, Md. November 16-18, 2003.
 - 49) Can an Online Mathematics Course Work?, College Mathematics Journal, 34, No. 4, 2003, pp. 270-279.
 - 50) Analyzing Dynamic Pendulum Motion in an Interactive Online Environment Using Flash, Science and Education Journal Special Issues, Volume 13 Nos. 4-5 June 2004, with C Ezrailson and C. Loving.
 - 51) The Pendulum: Scientific, Historical, Philosophical and Educational Perspectives, Springer, Dordrecht. Reprint of the first article.
 - 52) Analyzing Dynamic Pendulum Motion in an Interactive Online Environment Using Flash, Science and Education Journal Special Issues, in Matthews, M.R., Gauld, C.F. & Stinner, A. (eds.): 2005,
 - 53) The Impact of Web-Based Assessment and Practice on Students Mathematics Learning Attitudes. Journal of Computers in Mathematics and Science Teaching. 25 (3), pp. 251-279. Chesapeake, VA: AACE, with Nguyen, D., Hsieh, Y. (2006).
 - 54) A Crash Course on Testing and Assessment, 2006, Proceedings of the 17th ICTCM Conference, October 28-November 1, 2004, 2006.
 - 55) Interactive Mathematics QuizMaker and the Online Mathematics Placement Exams, 2006, Proceedings of the 17th ICTCM Conference, October 28-November 1, 2004, with Diem Nguyen, 2006.
 - 56) Using and Validating a Triadic Instrument, Academic Exchange Quarterly The Triadic Survey Instrument, with Dianne Goldsby, Summer 2007, ISSN 1096-1453 Volume 11, Issue 2.
 - 57) Pre-Service Teacher Perceptions of Teaching Fractions through a Survey, Essay, and Mathematical Misconceptions, Proceedings of the 20th International Conference on Technology in Collegiate Mathematics, Addison-Wesley, 2009, with Dianne Goldsby.
 - 58) RETENTION THROUGH REMEDIATION: ENHANCING CALCULUS I SUCCESS, ICTCM, Proceedings of the 23rd International Conference on Technology in Collegiate Mathematics, Pearson, 2012. with Sandra Nite, Jennifer Whitfield.
 - 59) Pre-Service Teacher Perceptions of Mathematics/Science Teacher Preparation, with Dianne Goldsby, Larry Kelly, and Dawn Parker Journal of Mathematics Pedagogy and Content, (6), 2014.
 - 60) Constructing and Role-playing Student Avatars in a Simulation of Teaching Algebra for Diverse Learners, iwth Ma, tingting; Brown, Irving; Kulm, Gerald; Davis, Trina; Lewis,

- Chance; Allen, Donald to appear in *Urban Education*, 2014.
- 61) *Challenges to Computing*, Recent and Innovation Trends in Computing and Communication (IJRITCC), Volume 2 Issue 11, 16 November 2014.
 - 62) Preservice Mathematics Teachers' Effectiveness In Addressing In Algebra, with Ayse Tugba Oner, S. Enrico Indiogine, Gerald Kulm, and Haiping Hao, School Science and Mathematics Association (SSMA)(2014), to appear.
 - 63) The Remarkable Number "1", *Science & Education*: Volume 23, Issue 9 (2014), Page 1845-1852.
 - 64) Confusion Theory and Assessment, *IJSET - International Journal of Innovative Science, Engineering & Technology*, Vol. 1 Issue 10, December 2014, with Dianne Goldsby.
 - 65) Challenges to Computing, Recent and Innovation Trends in Computing and Communication (IJRITCC), Volume 2 Issue 11, 16 November 2014.
 - 66) Preservice Mathematics Teachers' Effectiveness In Addressing In Algebra, with Ayse Tugba Oner, S. Enrico Indiogine, Gerald Kulm, and Haiping Hao, School Science and Mathematics Association (SSMA)(2014), to appear.
 - 67) Allen, G. Donald, Unfairness in Testing - Random Effects, Proceedings of the ICTCM 2016 meeting, March 2017.
 - 68) Nite, S. B., Morgan, J., Allen, G. D., Capraro, R. M., Capraro, M. M., & Pilant, M. (2015, October). A bridge to engineering: A personalized precalculus (bridge) program. *2015 IEEE Frontiers in Education Conference Proceedings*, Paper presented at the 45th Annual Frontiers in Education Conference: Launching a New Vision in Engineering Education. El Paso, TX (2053-2058).
 - 69) Nite, S. B., Allen, G. D., Bicer, A., Morgan, J., & Barroso, L. R. (2017, June). College Freshman Beliefs About Studying and Learning Mathematics: Results from a Summer Engineering Calculus Bridge Program. Proposal accepted to *2017 American Society for Engineering Education Annual Conference & Exposition*, Columbus, Ohio.
 - 70) Nite, S. B., Allen, G. D., Bicer, A., & Capraro, R. M. (2017, April). Strengthening precalculus skills in a summer program for engineering students. Paper accepted to *2017 AERA Annual Meeting, Knowledge to Action: Achieving the Promise of Equal Education Opportunity*. San Antonio, Texas.
 - 71) Nite, S. B., Allen, G. D., Bicer, A., & Capraro, R. M. (2017, April). Precalculus program for prospective engineering students. Paper accepted to *2017 NCTM Research Conference*. San Antonio, Texas.
 - 72) Nite, S. B., Allen, G. D., Bicer, A., & Morgan, J. (2016, June). Student engagement in a summer bridge program for engineering calculus success. *Electronic Proceedings of the 2016 Hawaii University International Conferences Science, Technology Engineering, Art, Math & Education Conference*. Honolulu, HI: Hawaii University International Conferences.
 - 73) Nite, S. B., Allen, G. D., Bicer, A., & Capraro, R. M. (2017, April). Strengthening precalculus skills in a summer program for engineering students. Paper accepted to *2017 AERA Annual Meeting, Knowledge to Action: Achieving the Promise of Equal Education Opportunity*. San Antonio, Texas.
 - 74) Nite, S. B., Allen, G. D., Bicer, A., & Capraro, R. M. (2017, April). Precalculus program for prospective engineering students. Paper submitted to *2017 NCTM Research Conference*. San Antonio, Texas.
 - 75) Nite, S. B., Allen, G. D., Morgan, J., Bicer, A., & Capraro, R. M. (2016, June). Engineering calculus bridge program success: Comparing variation results. In *Proceedings of the American Society for Engineering Education 2016*, Paper ID# 16610 presented at ASEE's 123rd National Conference and Exposition. New Orleans, LA: American Society for Engineering Education, Washington DC.
 - 76) Nite, S. B., Allen, G. D., Bicer, A., & Morgan, J. (2016, June). Student engagement in a summer bridge program for engineering calculus success. *Electronic Proceedings of the 2016 Hawaii University International Conferences Science, Technology Engineering, Art, Math & Education Conference*. Honolulu, HI: Hawaii University International Conferences.

- 77) Effective Technology for a Calculus Bridge Program: Bringing Education Home, Australian Association for Engineering Education Conference, Dec 7-0, 2015, <http://aeee2015.exordo.com>, with Jim Morgan, Sandra Nite, Robert Capraro.
- 78) Allen, G. Donald, THE VALIDITY AND RELIANCE OF BIG DATA PROJECTS, ICTCM Proceedings, 2015.
- 79) Morgan, J., Nite, S. B., Allen, G. D., Capraro, M. M., Capraro, R. M., & Pilant, M. (2015, April). Improving engineering calculus success through a summer program. In C. A. Shoniregun & G. A. Akmayeva. IICE-2015 Proceedings. Ireland International Conference on Education, Dublin, Ireland: Infonomics Society.
- 80) Allen, G. Donald, What can the Classroom Learn from the MOOC, Proceedings of the 25th Annual ICTCM Conference, 2015.
- 81) Allen, G. Donald, with Sandra B. Nite, Jim Morgan, Robert M. Capraro, and Mary M. Capraro, Improving Success in Engineering Calculus: Design of a Bridge Program, Proceedings of the AAEE2014 Conference Wellington, New Zealand, 2014.
- 82) Allen, G. Donald and Sandra Nite, Increasing Success in Calculus II with a Bridging Program, Hawaii Education and STEM Conference, Honolulu, Hawaii, (June 16-18, 2014), 10 pages.
- 83) Allen, G. Donald, USING A MATH PLACEMENT EXAM TO DEVELOP A PERSONALIZED PRECALCULUS PROGRAM, with Sandra Nite, M. Pilant, Proceedings of the 25th Annual ICTCM Conference, 2014.
- 84) THE ICTCM: TEACHING PORTAL TO THE 21ST CENTURY, with Sharon Sledge, Proceedings of the 25th Annual ICTCM Conference, 2014.
- 85) Allen, G. D with Sandra Nite, Ali Bicer, James Morgan, Luciana Borroso, Results from a Summer Engineering Calculus Bridge, Proceedings of the 2017 ASEE Annual Conference & Exposition, College Freshman Beliefs About Studying and Learning.
- 86) Nite, S. B., Allen, G. D., Bicer, A., & Capraro, R. M. (2017, April). Precalculus program for prospective engineering students. Paper accepted to 2017 NCTM Research Conference. San Antonio, Texas.
- 87) *Hierarchy of Knowledge – from Data to Wisdom*, *International Journal of Current Research in Multidisciplinary (IJCRM)*, Vol 2, 1, 2017, 15-23.
- 88) Allen, G. Donald, Simulations for the EPL Using Competitive Balance Models, *Journal of Sports and Physical Education*, e-ISSN: 2347-6737, p-ISSN: 2347-6745, Volume 4, Issue 2, (Mar. – Apr. 2017), PP 33-43. <http://www.iosrjournals.org/iosr-jspe/papers/Vol-4Issue2/G04023343.pdf>, DOI: 10.9790/6737-0402334.
- 89) Allen G.D. (2017) How do we define the Number “1?”. In: Allen G.D., Ross A. (eds) *Pedagogy and Content in Middle and High School Mathematics*. Sense Publishers, Rotterdam.

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OTHER WRITINGS

- 1) Your Bicameral Brain, LinkedIn, 2022
- 2) Quantum Miracles. LinkedIn, 2020
- 3) Allen, Don, Personalized Remediation Programs and Mini-Bridging, TeXMATYC Newsletter, 2014.
- 4) Allen, G. Donald, Multiple Representations IV, Estimating Pi, *Journal of Mathematics*

- Pedagogy and Content, (6), 2014.
- 5) Allen, G. Donald, Multiple Representations III, Journal of Mathematics Pedagogy and Content, (6), 2014.
 - 6) Allen, G. Donald, Multiple Representations II, Journal of Mathematics Pedagogy and Content, (5), 2013.
 - 7) Allen, G. Donald, Multiple Representations I, Journal of Mathematics Pedagogy and Content, (5), 2013.
 - 8) Allen, G. Donald, Impossible Problems, Journal of Mathematics Pedagogy and Content, (5), 2013.
 - 9) Allen, G. Donald, To Solve a Problem, Journal of Mathematics Pedagogy and Content, (5), 2013.
 - 10) Allen, G. Donald, American Presidents and Their Math, Journal of Mathematics Pedagogy and Content, (5), 2013.
 - 11) Allen, G. Donald, The Evil Twins – Testing and Stress, Journal of Mathematics Pedagogy and Content, (5), 2013.
 - 12) Allen, G. Donald, Let's Make War - Just for Fun, Journal of Mathematics Pedagogy and Content, (5), 2013.
 - 13) Allen, G. Donald, Can Online Education Work?, Journal of Mathematics Pedagogy and Content, (5), 2013.
 - 14) Allen, G. Donald, Teaching is a Balancing Act, Journal of Mathematics Pedagogy and Content, (4), 2012.
 - 15) Allen, G. Donald, Optimization - With and Without Calculus, Journal of Mathematics Pedagogy and Content, (4), 2012.
 - 16) Allen, G. Donald, How Do We Define the Number “1?” , Journal of Mathematics Pedagogy and Content, (4), 2012.
 - 17) Allen, G. Donald, Math Teacher Demographics in Texas, Journal of Mathematics Pedagogy and Content, (4), 2012.
 - 18) ODE Architect - A Review, Syllabus 14, 2001, 53.
 - 19) What do we do until MathML? An exploration of various math-online alternatives. in The Math/Science Online Newsletter, Winter 2000.

PAPERS SUBMITTED

Linear One-Cell Functional Methods for the Two Dimensional Transport Equation. Part I. The Nodal Formulation, Ann. Nucl. Sci. and Eng. with Paul Nelson. (25 pages)

CONFERENCE PROCEEDINGS

Allen, G. Donald, USING A MATH PLACEMENT EXAM TO DEVELOP A PERSONALIZED PRECALCULUS PROGRAM, with Sandra Nite, M. Pilant, Proceedings of the 25th Annual ICTCM Conference, 2014.

THE ICTCM: TEACHING PORTAL TO THE 21ST CENTURY, with Sharon Sledge, Proceedings of the 25th Annual ICTCM Conference, 2014.

Allen, G. Donald, and Goldsby, Dianne. Using Technology to Make New Assessment Instruments, Proceedings of the 18th International Conference on Technology in Collegiate Mathematics, Addison-Wesley, Boston. (2007).

A Crash Course on Testing and Assessment, 2006, Proceedings of the 17th ICTCM Conference, October 28-November 1, 2004, 2006.

Interactive Mathematics QuizMaker and the Online Mathematics Placement Exams, 2006, Proceedings of the 17th ICTCM Conference, October 28-November 1, 2004, with Diem Nguyen, 2006.

The Distance Education Degree Program for The Master of Mathematics with a Teaching Option At Texas A&M University, to appear in the Proceedings of the AACE Conference: SITE 2001-- Society for Information Technology and Teacher Education International Conference, Orlando, Florida; March 5-10, 2001. with M. Pilant.

Online Choices for Online Courses. A survey of the issues of developing an online course. Included is a discussion of various development products. Proceedings of the 13th ICTCM Conference, Atlanta GA, Addison-Wesley, 2000, 11-16.

WebCalC I, a description of the WebCalC project, it's history and features, Proceeding of the ICTCM Books and Monographs.

WORKSHOPS, EVENTS, ORGANIZED OR GIVEN

1. Workshop on Technology, Mathematics, and Mathematics Education, Nairobi, Kenya, August 11-18, 2010. In association with the Africa MathScience, Technology, Research & Education Foundation <http://distance-ed.math.tamu.edu/kenya-tz2010/>
2. ICTCM, Camtasia, full day, March 12, 2009.
3. GK-12 Special Workshop for Math Fellows, June 10 and June 13, 2008, College Station, TX,
4. Presentation, Misconceptions in Mathematical Understanding, CAMT (Conference for the Advancement of Mathematics Teaching), San Antonio, TX, July 9-11, 2008
5. Presentation, Cengage Regional Meeting, Dallas, TX, March 14, 2008
6. Workshop. ICTCM - Using Flash, Boulder Co, July 27-30, 2003. Principal speaker.
7. Presentation, All About Quadratics, CAMT (Conference for the Advancement of Mathematics Teaching), Henry B. Gonzales Convention Center, San Antonio, TX, June 28-30, 2007.
8. Co-chaired. P-16 Grassroots Initiative meeting and workshop, College Station, TX, March 7, 2007, Texas A&M University, College Station, TX.
9. TCCTA/TEXMATYC Workshop on Trends in College Algebra, (Allen presides), February 24, 2007, Austin, TX.
10. TAMU/Snook ISD. Half day workshop on using the digital camera, Excel, and digitizing software to situations and problems related to mathematics, April 15, 2006.

11. TAMU/Snook ISD. Half day workshop on digital devices as related to mathematics, April 8, 2006.
12. TAMU/TEA (Texas Education Agency)/PEIC (P-16 Educational Improvement Consortium), Fractions, Measurement and Scaling for professional development, March 4, 2006.
13. TAMU/Pasadena ISD, Developing 5E lessons applied to topics of measurement (eight hours), Pasadena, TX, February 25, 2006.
14. Pre-conference workshop Visual Algebra and Pre-calculus, (Six hours), TexMATYC/TCCTA Conference. (Invited) Houston, TX February 23-25, 2006.
15. TAMU/Pasadena ISD, Fractions, Measurement and Proportion for professional development, Pasadena, TX, October 29, 2005.
16. TAMU/TEXMatyc (Texas Math Association of Two Year College), Maple for the Classroom, October 28, 2005.
17. TAMU/Snook ISD, Using the TI-Navigator equipment, Snook, TX, October 15, 2005.
18. TAMU/TEA (Texas Education Agency)/PEIC (P-16 Educational Improvement Consortium), Fractions, Measurement and Scaling for professional development, October 8, 2005.
19. University of Idaho, Gateway Mathematics Group, Using Scientific Notebook and Camtasia, Moscow, ID, June 13-17, 2005.
20. Maple - in the Classroom, an online workshop given to Texmatyc instructors, April 9, 2004.
21. Teacher Quality Grant professional development workshops - series A conducted on Algebra II Sept 18, Oct. 16, Nov 13 and Dec. 4; series B conducted on Sept 25, Oct. 23, Nov 13, Dec 11, Jan 19, Feb 5, Feb 19. (eight hours each).
22. Teacher Quality Grant Type B Workshops (funded by THECB), July 6-9,12-13, 19-23, 2004; Houston TX.
23. Teacher Quality Grant Type A workshops (funded by THECB), May 13, Ft. Worth, May 14-15, Houston, May 20-21, 2004, Houston, TX.
24. ICTCM (International Conference on Technology in Collegiate Mathematics) - Mathematical Theory of Assessment - Using technology for assessment, Workshop. Tomball, TX, May 17-20, 2004.
25. ITLAB, brief afternoon workshop to Math faculty on the use of Flash MX, Texas A&M University, October 16, 2003.
26. College of Science - Open House, September 6, 2003, presentation on distance education , online masters of mathematics program.
27. ICTCM (International Conference on Technology in Collegiate Mathematics) - Using Flash for mathematics instruction, Workshop. Westminster, Co, July 27-30, 2003.
28. Conference for the Advancement of Mathematics Teaching - Math goes to hollywood. Houston Texas, July 17,2003
29. Math Camp - presentation to 45 junior high school students on the use of mathematics in Hollywood produced movies, July 11, 2003, College Station, TX
30. Philosophy Group - presentation to a group of philosophers and sociologist on the application of Flash to interactive logic proofs, June 2, 2003, College Station, TX
31. ICTCM (International Conference on Technology in Collegiate Mathematics) - Visual algebra, applying digital and visual technologies toward learning algebraic concepts, Workshop. Murfreesboro, TN, May 19-22, 2003.
32. Second Texas-Mexico Workshop on Numerical Particle Transport, College Station, TX,

Sept 2-4, 1992, co-organizer.

33. Third Texas-Mexico Workshop on Numerical Particle Transport, Mexico D.F., March 11-13, 1996, co-organizer.

34. Calculus Reform and Maple in the Classroom, April 3-4, 1998, sponsored by the National Science Foundation and conducted by SRI International. The meeting assembled a group of educators, many with extensive experience in calculus reform, more with teaching mathematics with Maple, and evaluation experts. co-organized with David Sanchez (See Funding.)

35. ICTCM Short Course. I was the principal speaker for a week long workshop on Web developments and placing math on the Web. Class notes. Colorado State University, Ft Collins, CO, Math 22-25, 2000 <http://www.academicsolutions.com>

36. University of Houston, Online Choices. Mini-short course for the UH Provost's office, October 17, 2000.

37. North Harris Community College, Web Calculus and other online courses, October 17, 2000.

38. ICTCM summer workshops in College Station and Madison, WI. I was the principal speaker for a week long workshop on Web developments and placing math on the Web.

39. Workshop on Internet editors. Sept 6-7 and 13-14, 2002. An ITWG - College of Science ITLAB project.

40. IT Lab, College of Science: Workshop on Flash, June 21, 2002.

41. IT Lab, College of Science: Workshop on Dreamweaver, August 29, 2001.

42. ICTCM Short Course. Principal speaker for a week long workshop on advanced multimedia applications. South Mountain College, Phoenix, AZ, May 19-23, 2002.

43. NASA Making Connections Workshop, Using digital imaging technology. San Jacinto Community College, Houston, TX. July 20, 2002.

44. NASA Making Connections Workshop, Using computer algebra systems, San Jacinto Community College, Houston, TX. August 17, 2002.

45. BVMUG - Brazos Valley Macromedia Users Group. Presentation on various software tools. Microage Corporation, College Station, TX. November 19, 2002.

46. Workshop. ICTCM - Visual Algebra, Murfreesboro, TN, May 19-22, 2003. Principal speaker.

OTHER EVENTS (RECENT)

1. Presentation, Stemhouse in Vietnam, February 12, 2019.

2. Panelist, Mathematics Matters in Education Workshop, April 1-3, 2017, Texas A&M University, College Station, TX

3. Invited Presentation, A Bridge to Engineering: A Personalized Precalculus (Bridge) Program, Frontiers in Education, October 21-24, 2015, El Paso, TX, with Sandra Nite, Jim Morgan, Robert Capraro.

4. Contributed Presentation, Confusion Matrices and Preservice Teacher Knowledge, ICTCM (International Conference on Teaching Collegiate Mathematics, March 13-15, 2015, Las Vegas, NV, with Dianne Goldsby.

5. Contributed Presentation, The End of Computing, ICTCM (International Conference on Teaching Collegiate Mathematics, March 13-15, 2015, Las Vegas, NV.

6. Invited Presentation, "A Fast and Furious Bridge to Calculus II – ONLINE!," AMATYC 40th Annual Conference, Gaylord Opryland Resort in Nashville, TN, November 13-16, 2014, with Sharon Sledge. Also

presented at ICTCM (International Conference on Teaching Collegiate Mathematics, March 13-15, 2015, Las Vegas, NV.

7. Poster Session, The Impact of Placement Exams on Retention for Engineering Mathematics, ICTCM (International Conference on Teaching Collegiate Mathematics, March 13-15, 2015, Las Vegas, NV, with Mike Pilant and Jennifer Whitfield.
8. Invited Presentation, The Remarkable Number One, 8th Annual International Conference on Mathematics & Statistics: Education & Applications, Athens, Greece, July 1-2, 2014.
9. Invited Presentation, Online courses in economics, a primer, International Business School of New York, September 24-27, 2014.
10. Invited Presentation, "Understanding Distance Education", European School of Economics, August 12-17, 2014
11. Invited Presentation, "Increasing Calculus II Success with a Bridging Program," 2014 Hawaii University International Conference, June 10-12 at the Ala Moana Hotel, with Sandra Nite.
12. Invited Presentation, Impossible Problems and MOOCs, ICTCM (International Conference on Teaching Collegiate Mathematics) 26th annual meeting, March 21-23, 2014.
13. Invited Presentation, Student Characteristics That Help Predict Success in Calculus: Results from a Summer Precalculus Program, ICTCM (International Conference on Teaching Collegiate Mathematics) 26th annual meeting, with Sandra Nite, March 21-23, 2014.
14. Invited Presentation, "Personalized Precalculus Program – A Summer Bridge Program", TCCTA Annual Meeting, San Antonio, TX, February 7, 2014.
15. Invited Presentation, Using a bridging program for Calculus Instruction, North Carolina State, January 15, 2014.
16. Invited Presentation, Pre-session, presented to the pre-session of the ICTCM (International Conference on Teaching Collegiate Mathematics) in San Antonio, March 7, 2013. All day workshop.
17. Invited Presentation, MOOCs and what they imply, TCCTA annual meeting in San Antonio, TX, February 7, 2014.
18. Invited Presentation, The Precalculus Program, North Carolina State University, November 20, 2013.
19. Invited Presentation (via Webinar), Advancing an Online Project in the Assessment and Effective Teaching of Calculus, with Mika Seppala and Eamonn Kelly, November 14, 2013. [The meeting is held in Adobe ConnectPro on Thursday 14 November, 18:00-19:00 EEST (Finland)/08:00-09:00 (California, USA)]
20. Invited Presentation, Understanding the predictive results of testing, University of Sao Paulo, Brazil, November 12, 2013.
21. Invited Presentation. Understanding MOOCs and online delivery, NSF SAVI conference on big data, October 24-27, 2013, Helsinki, Finland.
22. Invited Presentation, Misconceptions in Mathematics, Teacher Quality Annual Technical Meeting, Lost Pines, Resort, Bastrop, TX, April 2, 2013,
23. Invited Presentation, Triadic Surveys on Teacher Preparation, ICTCM (International Conference on Teaching Collegiate Mathematics) annual meeting, March 23, 2013.
24. Invited Presentation, Math Assessment Testing, ICTCM annual meeting, March 22, 2013.
25. Invited Presentation. Assessment and Teaching, NSF SAVI meeting, Tallahassee, FL, March 14-15, 2013.
26. Attended. NSF CADRE grant meeting, Washington DC. June 13-15, 2012.
27. Invited speaker, Innovations in Learning and Education Collaborative Workshop with Finnish researchers, Embassy of Finland. Washington DC, June 7-8, 2012.
28. Attended, Current Research on Community College Transfer Success, Hilton Hotel and Conference Center, May 29, 2012.
29. Chair, Math Education and Teacher Prep, ICTCM program committee, 2012.

30. Attended, ICTCM (International Conference on Technology in Collegiate Mathematics) Executive Steering Committee Meeting. March 22, 2012, Orlando, FL.
31. Attended, Teacher Quality Grants annual meeting, The Hyatt Regency Lost Pines Resort and Spa, 575 Hyatt Lost Pines Road, Lost Pines, TX, US, April 4-5, 2012
32. Chair, Math Education and Teacher Prep, ICTCM program committee, 2011.
33. Attended. NSF STEP annual grant meeting, Washington DC. March 11-13, 2012.
34. Member, Developmental Education Advisory Board, Texas Education Agency, October 28, 2011.
35. Invited participant, STEP Leadership Workshop at the University of Oregon on October 16-18, 2011
36. Attended, Texas Partners in P-16 Mathematics, Charles A. Dana Center, Austin, TX, May 2, 2011. (Co-Founder)
37. Attended, TAMU Collaborative summer Institute, June 20, 2011, Koldus, 110.
38. Invited Presentation, Mathematics Education in Kenya, TAMU, April 25, 2011.
39. Invited Presentation, Test Item Dependencies, AMUSE seminar, TAMU, April 20, 2011.
40. Attended, NSF Annual STEP Conference, Omni Shoreham Hotel, Washington DC, March 17-18, 2011.
41. Presentation to the MSC Jordan Institute for International Awareness, "Islamic Contributions to Mathematics," November 10, 2010, Texas A&M University.
42. Attended. Annual meeting, Texas Partners in P-16 Mathematics, Charles A. Dana Center, Austin, TX, October 21, 2010.
43. Consultant. Professional Development Summit, October 19-20, 2010, Airport Hilton Hotel, Austin, TX.
44. Attended. CBMS Forum on Content-Based Professional Development for Teachers of Mathematics on October 10-12, 2010 at the Hyatt Regency Hotel in Reston VA.
45. Interview. Visiting ABET team (Dr. James Miller, Univ of Rhode Island) for College of Engineering accreditation process, September 27, 2010.
46. Presentation. Misconceptions in Mathematics, AP pre-Calculus Institute, College Station, TX, July 25, 2009.
47. Presentation. The MS Online program in mathematics, AP Calculus Institute, College Station, TX, July 23, 2010.
48. Presentation. Early Mechanical Calculators, AP Pre-Calculus Institute, College Station, TX, July 29, 2009.
49. Presentation. The MS Online program in mathematics, AP Calculus Institute, College Station, TX, July 21, 2009.
50. Presentation. The National Math Panel, Gladewater ISD, Gladewater, TX, July 14, 2009.
51. Attended. Teacher Quality Grants Technical Assistance Meeting, Airport Hilton, Austin, TX, October 30, 2008.
52. Attended. National Math Panel Faculty Forum, Marriott Wardman, Washington, DC, October 6-7, 2008.
53. Attended. College Board AP, Connect to College Success, Renaissance Hotel, Chicago, October 3-5, 2008.
54. Presentation. The MS Online program in mathematics, AP Calculus Institute, College Station, TX, July 16, 2008.
55. Panelist for Session 3. Mathematics Education in China and the United States, July 1-3, 2008, College Station TX. Also moderator for Session 5.

56. Attended. Joint PIC/IAB Directors meeting of the Institute for Mathematics and Applications (IMA), Minneapolis, MN, June 12, 2008.
57. Presentation, Research on teaching and learning fractions, to the GK-12 teachers, June 3 and 5, 2008, College Station, TX.
58. Participated, Comparability study between TExES tests and Praxis tests, supported by the Educational Testing Service and the Texas Education Agency, San Antonio, TX, April 10-11, 2008.
59. Panelist, ICTCM, "Evaluating online courses/programs." March 5-8, 2008.
60. Attended, Enhancing Education, System wide Success, 2008 Teaching with Technology Conference, Texas A&M University, February 12, 2008.
61. Panelist, On e-content, at the JEM, Joining Educational Mathematics, an EU-funded thematic network for Mathematics Education, January 31 - February 2, 2008.
62. Attended, Southwest Regional NSF GK-12 Conference College Station, Texas -- November 9-10, 2007
63. Invited, Improving Science and Math Education: Texas Confronts the Gathering Storm, A dinner and forum sponsored by The Academy of Medicine, Engineering and Science of Texas and Rice University's James A. Baker III Institute for Public Policy, funded by Dow Chemical and the Greater Texas Foundation, October 12, 2007, Houston Tx.
64. Attended, AMS Committee on Education Annual Meeting, October 25-27, 2007, Washington, DC.
65. Attended, Teacher Quality Grant workshop and Dana Center Annual Higher Ed Meeting, Airport Austin Hilton, October 18-20, 2007, Austin, TX.
66. Attended, Course Redesign Workshop, Texas Higher Education Coordinating Board, October 15, 2007, Austin, TX.
67. Presentation. Focus Group for the Governor's Commission for a College Ready Texas, Meeting of Business Leaders and Faculty to Discuss College Readiness Standards September 7, 2007, 12:30 pm – 5:00 pm Austin Airport Hilton, Austin Texas.
68. Discussed, college readiness to the Governor's Commission for a College Ready Texas, (by phone), August 14, 2007.
69. Presentation. (Brief) The MS Online program in mathematics, AP Calculus Institute, College Station, TX, August 2, 2007.
70. Appointed and Attended. TQ Instructional Leadership e-Group meeting, Austin, TX, June 10-11, 2007. (By invitation with expenses.)
71. Attended. MSRI Workshop Critical Issues in Education: Teaching Teachers Mathematics, May 30-June 1, 2007, MSRI, Berkeley, CA.
72. Attended. MTC (Math TEKS Connections) Geometry Project Workshop, Austin, TX., May 22, 2007.
73. Reviewed. Department of Mathematics Self Study for Texas A&M University in Corpus Christi, May 9-11, 2007.
74. Attended. Texas Higher Education Coordinating Board, Conference on Course Redesign, May 2, 2007, Austin, TX. (Invited.)
75. SERA program committee, Instruction, learning and cognition section, 2007-2008.
76. Attended. DEVELOPING INFORMAL SCIENCE PARTNERSHIPS CHARLES WALTER, CEO, FORT WORTH MUSEUM OF SCIENCE & HISTORY 22 FEBRUARY 2007 2:30 p.m. 601 Rudder, College Station, TX.
77. Presentation. Problem Solving: Survey of the 9-12 modules for the MTC project, January 13-

- 14, 2007, Airport Hilton, Austin, TX.
78. Co-chaired. P-16 Grassroots Initiative meeting, College Station, TX, March 7, 2007
79. Presided. TCCTA/TEXMATYC special session on Trends in College Algebra, (Allen presides), February 24, 2007, Austin, TX.
80. Attended. DEVELOPING INFORMAL SCIENCE PARTNERSHIPS CHARLES WALTER, CEO, FORT WORTH MUSEUM OF SCIENCE & HISTORY 22 FEBRUARY 2007 2:30 p.m. 601 Rudder, College Station, TX.
81. Presentation. Problem Solving: Survey of the 9-12 modules for the MTC project, January 13-14, 2007, Airport Hilton, Austin, TX.
82. Co-chaired. P-16 Grassroots Initiative meeting, Austin, TX, December 6, 2006
83. Appeared. "STRATEGIES FOR TEACHING MATH ONLINE" , NOVEMBER 30, 2006, video interview on e-Learning, a StarLink Production, interview taping on November 10, 2006, <http://www.starlinktraining.org/programs/programs2007/nov30.asp>. followed by a telephone conference call with viewers.
84. Attended. Online Educa Berlin 2006 and the WebALT: Web Advanced Learning Technologies Workshop, Berlin, Germany, October 28-December 1, 2006, See: <http://www.online-educa.com/> and http://webalt.math.helsinki.fi/webalt-OEB/content/program/index_eng.html. (Expenses paid.)
85. Presentation. The TAMU Mathematics Department Online Placement Examination - Preliminary Results. Presented to the Texas A&M Academic Operations Committee (AOC), November 1, 2006.
86. Co-chaired. P-16 Grassroots Initiative meeting, Austin, TX, October 12, 2006
87. Pre-conference workshop Visual Algebra and Pre-calculus, (Six hour workshop), TexMATYC/TCCTA Conference. (Invited) Houston, TX February 23-25, 2006.
88. Presentation. e-Learning in 2020, at the Information Technology Working Group seminar, September 13, 2006, College Station, TX.
89. Selected. Math TEKS Connections - Geometry Advisory Board. August 30, 2006. First meeting, Crown Plaza Hotel, Austin, TX, September 30, 2006.
90. Testified. On College Readiness, before the Texas Higher Education Coordinating Board and the Texas Education Agency, September 22, 2006, Austin, TX.
91. Attended regular Math and Education meetings, TLAC, Spring 07.
92. Presentation. Using animations in mathematics & Math Goes to Hollywood,
93. Presented to Summer Honors Invitational Program (SHIP) participants, Texas A&M University, July 10, 2006.
94. Presentation. The CO-STEM Highway to Equal Education Access, STEM finalist grant presentation to the Texas Education Agency (TEA), Austin, TX, June 20, 2006.
95. Presentation. To PEER student group, Math Goes to Hollywood, at the TAMU Vet School, June 15, 2006.
96. Attended. Joint PIC/IAB meeting of the Institute for Mathematical Analysis (IMA), Minneapolis, MN, June 12, 2006.
97. Attended, MTC research project meeting (Math TEKS Connections), Texas A&M University, June 1, 26, July 16, 25, September 12,20, 2006.
98. Presentation. On the new calculus placement exam to the College of Engineering committee of advisors, May 31, 2006.
99. Appeared. KBTX-TV news show on the LOTTO, May 17,18, 2006. Joe Brown, newscaster.
100. Participated - co hosted. The grass-roots P-16 Consortium at the Charles Dana Center,

- May 11, 2006. (Co-organizers, Mel Griffin, Linda, Zientek, and Gloria White)
101. Appeared. 15 Magazine Television show, hosted by Sharon Colson, Topic: The Texas Math Talent Search, taped on May 3. Showed on May 11, 13, 14.
 102. Presentation. Math Goes to Hollywood. Presented to 18 students from Leakey Tx, April 27, 2006.
 103. Participated. THECB panel on online professional development, Texas A&M University, April 11, 2006.
 104. Organized, Math Summit between UH, UT, and TAMU, March 31, 2006, Texas A&M. Discuss the combined efforts of the three campus on technology mediated mathematics teaching and education projects.
 105. Attended regular Math and Education meetings, TLAC, Spring 06.
 106. Attended. Sigma Xi colloquium on K-12 education, Texas A&M University, March 28, 2006.
 107. Participated. GK-12 Fellowship NSF grant national meeting, Washington DC, March 24-26, 2006.
 108. Presentation. Fractions, TAMU/TEA (Texas Education Agency)/PEIC (P-16 Educational Improvement Consortium), March 4, 2006.
 109. Attended, MTA research project, Center for Distance learning Research, (Brief) Presentation on visualizing middle school math, Bryan, TX, Feb 18, 2006.
 110. Reviewed MTM3 project in Algebra II, TAMU-Commerce & ESC IV, Houston. February 6, 2006
 111. Attended, MTA research project, Center for Distance learning Research, (Brief) Presentation on visualizing middle school math, Bryan, TX, Jan 2, 2006.
 112. Attended, MTA research project, Center for Distance learning Research, Presentation on the 5E method, Bryan, TX, November 19, 2005.
 113. Attended, GK-12 Southwest Regional Conference, College Station TX, October 22, 2005.
 114. Attended TAMU-Mathematics Talent Contest, October 22, 2005.
 115. Attended TAMU/TEA (Texas Education Agency)/Mathematics TAKS Awareness, funded grant planning meeting, CDLR, Bryan, TX, October 22, 2005.
 116. Attended, NSF Workshop on Math Majors, Washington DC, August 12-13, 2005.
 117. Presentation. Using mathematics to make animations, Summer Honors Invitational Program, sponsored by the Office of Honors Programs and Academic Scholarships, June 20, 2005.
 118. Attended, Designing for Excellence and Achievement in Algebra I, (San Antonio), June 2-4, 2005.
 119. Attended The Mathematical Knowledge for Teaching (K-8): Why, What and How?, May 25-28, 2004.
 120. Attended, Charles A. Dana Center, TexMATYC, TAMU meeting in Austin on funding strategies for professional development courses, May 12, 2005.
 121. Attended Partnerships in Teacher Education Luncheon, hosted by College of Education and Human Development, Texas A&M University, March 8, 2005.
 122. Attended GK-12 Fellowship NSF grant national meeting, Washington DC, March 3-6, 2005.
 123. Presentation. Math goes to Hollywood, Presented at Aggieland Saturday, Texas A&M University, College Station, Tx. February 27, 2005.

124. Presentation. Research problems in assessment, presented to Dr. David Larson's Math 489 - Research Problems class, February 24, 2005.
125. Presentation. Thwarted Innovation: What Happened to e-learning and Why. Information Technology Working Group (ITWG) seminar, December 7, 2004.
126. Attended, Workshop for the Teacher Quality Grants Program - Type B Grants, Texas Higher Education Coordinating Board (THECB), Austin, TX, November 19, 2004.
127. Attended, ICTCM, (International Conference on Technology in Collegiate Mathematics) Executive Steering Committee Meeting. New Orleans, Oct 27, 2004.
128. Attended, Academy Advisory Committee meeting at the 8th Annual 8th Annual Conference on School-University Partnerships, Sept 26-27, 2004, in San Antonio.
129. Attended, Math Star annual directors meeting, Los Angeles, CA, Sept 22-24, 2004. (See <http://mathstar.lacoe.edu/welcome.html>)
130. Attended, 2004 Science & Mathematics, Excellence for All Students Conference, August 13, 2004, 8:00am - 4:30pm, Bryan-College Station, TX.
131. Attended, Workshop for the Teacher Quality Grants Program - Type A Grants, Texas Higher Education Coordinating Board (THECB), Austin, TX, August 4, 2004.
132. Attended, 5th Annual Chancellor's Invitational Conference for The Academy for Educator Development, Houston, TX, June 24-26, 2003. Chaired discipline-focus group meeting. Attended Regents II special meeting.
133. Attended, REU seminar at the offices of the Vice President for Research, TAMU, June 23, 2004.
134. Attended, "Dialog 2004: DMS and the Mathematical Sciences Community," Washington, DC, April 30-May 1, 2004.
135. Attended, "Accessing NASA's Educational and Research Funding Opportunities" workshop, at the UTSA - San Antonio, TX, April 26, 2004.
136. Participant, Teacher Quality Grants Executive Session, THECB/TEA organizers, Region VI service Center, Huntsville, TX, April 7, 2004.
137. Presentation, Mathematics Education Seminar, TLAC, Texas A&M University, March 11, 2004.
138. Attended MSRI (Mathematical Sciences Research Institute), Assessment Issues Conference, Berkeley, CA, March 7-10, 2004.
139. Panel Discussion Participant, Distance Education Forum, Evans Library, Texas A&M University, February 26, 2004.
140. Participant, Teacher Quality Grants Executive Session, THECB/TEA organizers, Region VI service Center, Huntsville, TX, February 25, 2004.
141. Presentation, Texas A&M, Using 3D Rendering Software, Information Technology Working Group, Texas A&M University, February 24, 2004.
142. Attended Texas A&M 4th Annual Assessment Conference, College Station, TX, February 2-3, 2004.
143. Attended Texas A&M Assessment Workshop given by Thomas Angelo at TAMU , College Station, TX, February 2, 2004.
144. Attended QEP (Quality Enhancement Program) luncheon and mini-conference , Texas A&M, January 29, 2004.
145. Attended WebCT Vista Workshop, TAMU, January 5-9, 2004.
146. Attended New Teacher Quality Grants Program Workshop sponsored by the Texas Higher Education Coordinating Board, Austin, TX, November 14, 2003.

147. Attended, Wexford Institute annual meeting, Reno NV November 1, 2003.
148. Attended, ICTCM, (International Conference on Technology in Collegiate Mathematics) Executive Steering Committee Meeting. Chicago, Oct 29, 2003.
149. Attended Maple Days Workshop, Texas A&M University, November 7-8, 2003. Robert Lopez from Maplesoft speaker.
150. Participant in PT3*L3 Pre-Conference Institute at the American Evaluation Association (AEA) Annual Conference. Sponsored by the Wexford Institute, Reno, NV, November 3-4, 2003.
151. Participant in Ninth Annual October Pre service Mathematics Conference, Lakeway Inn and Resort, Austin, TX, October 23-25, 2003. Sponsored by the Charles A. Dana Center of The University of Texas, Austin, TX.
152. Regularly attended, Approximation Theory Seminar, Mathematics Department, TAMU, 2001-2004.
153. Participant in BVMUG, Macromedia, Microage, College Station, TX. June 17, 2003.
154. Participant in 3rd Annual Assessment Conference, February 10-11, 2003, Texas A&M University, College Station, TX.
155. Attended Sixth Annual Conference on School-University Partnerships, Omni Hotel, San Antonio, TX, October 13-15, 2002.
156. Attended Regents Initiative Conference and Workshop, Houston, TX (Greenspoint Wyndom) June 13-15, 2002.
157. Participated: e-Math video taping, Wimberley, TX, July 15, 2002: The emath Project.

AWARDS

- Nominated, to participate in the Texas College Readiness Project in the area of Mathematics, supported by the Educational Policy Improvement Center (EPIC), 2008.
- Appointed, Maplesoft Academic Advisory Board (MAAB), February, 2008-2012.
- Appointed Ambassador for Maple, 2016-.
- History of Mathematics has been selected as one of the best educational resources on the Web by StudySphere, June 20, 2006.
- Fellow, Texas A&M University Academy of Educator Development, 2003-present.
- Elected to membership in Merlot - Multimedia Educational Resource for Learning and Online Teaching. (MERLOT is a cooperative of individual members and institutions of higher education interested in improving teaching and learning.), February 13, 2004
- Selection for the Academic Keys Who's Who in Sciences Higher Education (WWSHE): <http://sciences.academickeys.com/>, 2004.
- Flash Demos for Understanding Statistics can help students learn to create histograms, compile pie charts, and demonstrate the mean, variance, and correlation of self-selected data points. www.math.tamu.edu/dallen/flash-demo
- Web Bytes - December 2003, December 6, 2003.
- My Web sites on visual understanding of statistics and physics featured in the Math Forum Newsletter: "The Math Forum @ Drexel publishes a newsletter once a week and we have chosen your site, Flash Demos for Understanding Statistics, to feature in our October 13, 2003 issue."
- Reception honoring Editors of Scholarly Journals, TAMU University Libraries, October 1, 2003.
- Web site referenced by the International Center for Scientific Research, December 17, 2002

- TAMU, Department of Mathematics, Service award. December 13, 2002.
- Appointed as a member of the Academy for Educator Development, a part of the Regents' Initiative for Excellence in Education. (January 7, 2002)
- My History of Mathematics web site was recognized by the Sci/Links page of the NSTA. Here are the criteria for selection. Certificate.
- My history of mathematics Web site was recognized and linked to by the Ethnomathematics Digital Library of the Pacific Resources for Education and Learning. May 4, 2003.
- Recognition for serving more than 10 years as judge of the Brazos Valley Regional Science Fair, awarded 2001.
- TAMU Mentors Program recognition for giving a presentation in the Lessons Learned seminar, March 3, 2000.
- TAMU, Department of Mathematics, Service award. December, 2000.
- Texas A&M University, Department of Mathematics service award, 1999 and 2001;
- Web site referenced by the International Center for Scientific Research, December 17, 2002
- TAMU, Department of Mathematics, Service award. December 13, 2002.
- Appointed as a member of the Academy for Educator Development, a part of the RRegents' Initiative for Excellence in Education. (January 7, 2002)
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ADDRESSES AND RECOGNITION

- 1) Rocky Mountain Mathematics Consortium on Nonlinear Functional analysis, Santa Fe, New Mexico, July, 1971.
- 2) Fourth International Federation on Information Processing, Santa Monica, California, October, 1971.
- 3) American Mathematical Society Winter Meeting, Las Vegas, Nevada, January, 1972. (Ten-minute talk)
- 4) Conference on P.D.E., Lubbock, Texas, May, 1972.
- 5) Rocky Mountain Mathematics Consortium on Stochastic Processes and Stochastic Differential Equations, Edmonton, Alberta, Canada, July, 1972.
- 6) Symposium on Vector and operator Valued Measures and Applications, Alta, Utah, August, 1972. (Invited address)
- 7) American Mathematical Society Winter Meeting, Dallas, Texas, January, 1973.
- 8) U.S. Army Mathematics Research Center, Conference on Non-Linear Elasticity, Madison, Wisconsin, April, 1973.
- 9) Invited Lectures on Spectral Multiplicity at the University of Mexico City, June 1973.
- 10) American Mathematical Society Winter Meeting, San Francisco, California, January, 1974. (ten-minute talk)
- 11) Integration in Function Spaces with Applications, June 3-7, 1974 at the University of

- Connecticut, invited talk.
- 12) American Math Society Winter Meeting, Washington, D.C., January 1975. (ten-minute talk)
 - 13) Conference and Workshop on Pettis Integration, University of Illinois, March 15-17, 1975.
 - 14) Symposium on the Calculus of Variations and Optimal Control, September 22-24, 1975, University of Wisconsin.
 - 15) American Math Society Winter Meeting, San Antonio, Texas, January, 1976.
 - 16) University of Florida, Gainesville, invited address, August 1976.
 - 17) Conference on Riesz Spaces Oberwolfach, Germany, July 1977, invited address.
 - 18) AMS Winter Meeting, Biloxi, Miss., January 1978.
 - 19) AMS Summer Meeting, Ann Arbor, Mich., August 1980.
 - 20) University of Texas, San Antonio, Special Session address, June 1981.
 - 21) Great Plains Operator Theory Conference, University of Kansas, September 1981.
 - 22) Conference on Riesz Spaces and Operator Theory, Oberwolfach, Germany, July 1982, invited address.
 - 23) Conference on Sequence Spaces, St. Lawrence University, June 1985.
 - 24) Fifth International Symposium on Approximation Theory, College Station, TX, January 1986.
 - 25) Southwest Texas State University, invited address, February 1986.
 - 26) Great Plains Operator Theory Conference, University of Kansas, May 1987.
 - 27) University of Wisconsin - Milwaukee, Department of Mathematics, invited address Oct. 1988.
 - 28) University of Minnesota, Dept. of Political Science, Oct. 1988, invited address.
 - 29) Fifth IIMAS Workshop on Numerical Analysis, Merida, Yucatan, Mexico, Jan. 1989, invited address.
 - 30) Instituto de Investigaciones en Matematicas Aplicadas y en Sistemas, Jan. 9-10, 1989, invited address.
 - 31) Great Plains Operator Theory Symposium, University of Houston, May 4-7, 1989.
 - 32) UT-A&M Informal Regional Functional Analysis Seminar, July 23-24, 1989, Texas A&M University, invited address.
 - 33) First Mexico-Texas Workshop on Numerical Particle Transport, March 22-23, 1990. UNAM, Mexico City, Mexico, invited address.
 - 34) II Simposium de Fisica Aplicada, Monterrey Mex. Sept. 1990, invited address.
 - 35) IMSL, Houston, TX. August 9, 1991, invited address.
 - 36) 12th International Conference on Transport Theory, Albuquerque, New Mexico, Aug 12-16, 1991, invited address.
 - 37) III Simposium Internacional de Fisica Aplicada, Monterrey, N.L., Mexico, October 17-19, 1991, invited address.
 - 38) Seventh Texas International Symposium on Approximation Theory, Austin, TX January 3-7, 1992, contributed talk.
 - 39) Sixth IIMAS-UNAM Workshop on Numerical Analysis and Optimization, Oaxaca, Mexico, January 7-11, 1992, invited talk.
 - 40) International Symposium on Numerical Transport Theory, Moscow, Russia, May 26-30, 1992, invited talk.
 - 41) Second Texas-Mexico Workshop on Numerical Particle Transport, College Station, TX, Sept 2-4, 1992, invited talk.
 - 42) Second Interagency Symposium on Stabilization of Soils and Other materials, New Orleans,

- November 2-5, 1992, invited talk.
- 43) Center for Approximation Theory, Annual Symposium, College Station, TX., March 12-13, 1993, invited (35 min) talk.
 - 44) Third Texas-Mexico Workshop on Numerical Particle Transport, Mexico March 13-15, 1996, invited.
 - 45) International Conference on Dynamical Systems and Differential Equations, Springfield, MO., May 29-June 1, 1996. Invited 40 minutes
 - 46) SIAM National Meeting, Minisymposium on Transport Problems, Kansas City, MO, July 21-24, 1996. Invited 20 minutes
 - 47) Closed linear functional methods for the two dimensional transport equation, Center for Approximation Theory Annual symposium, April 25, 1997. 40 minutes
 - 48) Hermite-Legendre Interpolation, University of Wisconsin --- Madison Centenary Conference, June 1, 1997.
 - 49) The Charles A. Dana Center, Multimedia Demonstration and Consultation, Austin, TX May 7, 1997. invited (35 min) talk.
 - 50) Gulf Coast Consortium of Community Colleges, Houston (June 19-20, 1998) Workshop on SNB WebCalc
 - 51) CAMT (Conference for the Advancement of Mathematics Teaching), San Antonio, TX July 22-24, 1998 WebCalc
 - 52) ICTCM, 11th Annual International Conference on Technology in Collegiate Mathematics, Nov 19-22, 1998 WebCalc (two talks)
 - 53) A Faculty Forum: Getting started using technology, Texas A&M University, August 25, 1998
 - 54) Invited Presentation, A Faculty Forum: Getting Started Using Technology, sponsored by Office of Distant Education, Texas A&M University, Title: The WebCalc Project - An Internet-Based Calculus Course, August 25, 1998
 - 55) Invited Presentation, CAMT (Conference for the Advancement of Mathematics Teaching), San Antonio, TX, July 22-24, 1998 The WebCalc Project (Repeated twice) (one hour.)
 - 56) Invited Presentation, CAMT (Conference for the Advancement of Mathematics Teaching), Dallas, TX, July 8-12, 1999 The WebCalc Project --- Two Years of Experience. (one hour.)
 - 57) Invited Presentation, CAMT (Conference for the Advancement of Mathematics Teaching), Dallas, TX, July 8-12, 1999, The Present and Future of Online Mathematics Education. (one hour.)
 - 58) Invited Pre-session. ICTCM, November 4, 1999, San Francisco, CA. Panelist for an all day session on Internet-based mathematics education.
 - 59) ICTCM Summer Workshop of math-on-Web, Ft. Collins, Co May 21-24, 2000.
 - 60) Principal speaker at the ICTCM Pre-session, November 15, 2000, Atlanta, GA.
 - 61) AACE Conference: SITE 2001--Society for Information Technology and Teacher Education International Conference, Orlando, Florida; March 5-10, 2001.
 - 62) ICTCM Summer Workshop of Math-on-Web, College Station, TX May 22-25, 2001.
 - 63) Invited Presentation. CAMT (Conference for the Advancement of Mathematics Teaching), The Texas A&M online masters program. San Antonio, TX, July 29, 2001.
 - 64) Preparing online assessments. A complete JavaScript program. San Antonio, TX, July 30, 2001.
 - 65) ICTCM Summer Workshop of Math-on-Web, Madison, WI July 29-Aug 1, 2001.
 - 66) Invited Presentation. Mississippi-Louisiana MATYC Conference at LSU-Eunice. Creating

- online assessment instruments. September 22, 2001.
- 67) Invited Presentation. ICTCM, November 1, 2001, Baltimore, MD. Moderator for an all day session on Internet-based mathematics education.
 - 68) Invited Presentation. ICTCM, November 2, 2001, Baltimore, MD, Professional Development workshop of creating Web-based assessments. (2.5 hours)
 - 69) Invited panelist . 2nd Annual Assessment Conference "Measuring what Matters Most", Texas A&M University, Feb 11-12, 2002
 - 70) Invited Presentation. The 15th annual ;Science, Technology & YOUth Symposium, "Math Goes to Hollywood", Texas A&M University, March 2-3, 2002.
 - 71) Invited Presentation. The dynamics of political power, Cal State Poly Pomona, Pomona, CA, March 10, 2002.
 - 72) Invited Presentation. Sam Houston State University, September 27, 2002.
 - 73) Invited Pre-session. ICTCM, October 30, 2002, Orlando, FL. Using digital imaging technologies to teach mathematics concepts. (3 hours)
 - 74) Invited Presentation. DEC 2003, Building a quality online masters program, January 21, 24, 2003.
 - 75) Invited Presentations. (4 hours) RGVCTM (Rio Grande Valley Council on Teaching Mathematics), Using animations in mathematics instruction, McAllen, TX, November 16, 2002.
 - 76) Invited Presentation. Texas Community College Teachers Association, Using digitization for mathematics understanding. February 21-22, 2003.
 - 77) Invited Presentation. "Math in the Movies", Science Technology and Youth Symposium, March 1, 2003.
 - 78) Panel Discussion, NCTM (National Council of Teachers of Mathematics), Let's Get Together: WWW-based Distance Education for Mathematics Teachers, San Antonio, April 11, 2003.
 - 79) Invited Presentation. CAMT (Conference for the Advancements of Mathematics Teaching), "Math Goes to Hollywood," July 17, 2003.
 - 80) Invited Presentation. TxDLA Regional Groups Meeting, Visual mathematics - an exploration of new visual mathematics in the algebraic sciences, College Station, TX August 18, 2003. (TxDLA - Texas Distance Learning Association) 30 minutes
 - 81) Invited Presentation. Seventh Annual Conference on School-University Partnerships, Sept 28-30, 2003, San Antonio, TX - Educator Perceptions of Math and Science Teacher Preparation Programs, with Dianne Goldsby, Larry Walker, Dawn Parker.
 - 82) ICTCM (International Conference on Technology in Collegiate Mathematics) Annual Conference, What is the status of reform algebra?, Chicago, Illinois, Oct 29, 2003.
 - 83) Invited Presentation. ICTCM (International Conference on Technology in Collegiate Mathematics) Annual Conference, Using Camtasia - a developmental workshop, Chicago, Illinois, Oct 30, 2003.
 - 84) Keynote Address. Multiple Representations - a journey to the future, at the "Aiming for Excellence in Mathematics Teacher Preparation, A Seminar for Teacher Educators," Math TEKS Connections, College Station, TX, May 18-20, 2007.
 - 85) Keynote Address. Technology Usage in the College Algebra Course, The Enhanced WebAssign (EWA) Teaching & Learning Workshop, Thomson Publishing, San Diego, CA, March 17, 2007.

- 86) Presentation. The College Algebra Survey, presented at the TexMATYC (Texas Association of Two Year Colleges, Arboretum Renaissance Hotel, Austin TX, February 24, 2007.
- 87) Invited Presentation, Focus on College Algebra, presented at the TexMATYC Section of the TCCTA Annual Meeting, February 23-24, 2007, Austin, TX.
- 88) Presentation. The Triadic Survey in Building Capacity, with Dianne Goldsby, presented at the 7th Annual Texas A&M University Assessment Conference, February 22-23, 2007, College Station, TX.
- 89) Presentation - Using and Validating a Triadic Instrument to Survey Pre-Service Teacher Preferences, with Dianne Goldsby, 2007 Annual Meeting of the Southwest Educational Research Association (SERA), February 7-10, 2007, San Antonio, TX.
- 90) Keynote Address. What technology for teaching mathematics works and why – a perspective, presented at the San Jacinto College Annual Mathematics Meeting, November 18, 2006; Houston, TX.
- 91) Invited Presentation. College Algebra — What Colleges Want, presented at the AMATYC Annual Meeting, November 2-5, 2006; Cincinnati, OH.
- 92) Invited Presentation. College Algebra Across Texas—Survey Results, presented at the Charles A. Dana Center's Annual Mathematics and Science Higher Education Conference and Teacher Quality Higher Education Technical Assistance Meeting " Ensuring College Readiness in Mathematics and Science Higher Education," October 26-28, 2006; Lakeway Inn, Austin, TX.
- 93) Keynote Address . Old Technology, New Technology, Emerging Technology. What works and Why, Keynote address presented to HCC Title V Faculty Leadership Program - Math Workshop, October 20, 2006.
- 94) Invited Presentation. e-Learning in 2016, at the Math Education in 2016 conference, Helsinki, August 8-10, 2006.
- 95) Invited Presentation. Using the Pre-Calculus package, Teacher Quality Grants Conference, Charles A. Dana Center and Texas Higher Education Coordinating Board, Austin, Tx, March 27-28, 2006.
- 96) Panel Presentation. ICTCM, (International Conference on Technology in Collegiate Mathematics) -Should we be teaching undergraduate online courses?, Orlando, FL, March 16-20, 2006. (3/17)
- 97) Invited Presentation. ICTCM, (International Conference on Technology in Collegiate Mathematics) -Teaching higher mathematics courses online, Orlando, FL, March 16-20, 2006. (3/17)
- 98) Panel Presentation. ICTCM, (International Conference on Technology in Collegiate Mathematics) -Techniques for applying for and obtaining grants, at the Pre-Session, Orlando, FL, March 16-20, 2006. (3/16)
- 99) Invited Presentation. Using and Validating a Triadic Instrument to Survey Middle School Children, 2006 Annual Meeting of the Southwest Educational Research Association (SERA), Austin, February 8-10, 2006, with Dianne Goldsby and Larry Kelly.

- 100) Invited Presentation. "Test Item Dependencies", Bowling Green State University, December 2, 2005.
- 101) Invited Presentations. (2 hours) RGVCTM (Rio Grande Valley Council on Teaching Mathematics), MathStar materials and the TQA pre-calculus course-in-a-box , McAllen, TX, November 19, 2005 (with Amanda Ross).
- 102) Invited Presentation. "Using TQA Grants with Community Colleges", Charles A. Dana Center's Annual Mathematics and Science Higher Education Conference, Lakeway Inn and Resort, Austin, TX, November 17-19, 2005.
- 103) Invited Presentation. Coastal Bend Mathematics Collaborative, "Disconnects between High Schools and Colleges within Mathematics Education in Texas", Nov 13-15, 2005.
- 104) Invited Presentation. An In-Depth Study of Educator Perceptions of Mathematics/Science Teacher Preparation by Means of a Triadic Instrument and Interviews, presented at the Association for Teaching and Curriculum (AATC), (with Dianne Goldsby and Larry Kelly), Austin, TX, October 6-8, 2005.
- 105) Invited Presentation. Precalculus Completely TEKS Aligned, CAMT (Conference for the Advancement of Mathematics Teaching), Adams Mark Hotel, July 11-13, 2005. (with P. Poage)
- 106) Invited Presentation. MathStar Project Using Interactive Technologies, CAMT (Conference for the Advancement of Mathematics Teaching), Adams Mark Hotel, July 11-13, 2005. (with D. Jolly and A. Ross)
- 107) Invited Presentation, Teacher Quality Type B Mathematics Awards Workshop for 2004-05 and 2005-06 Awardees, Doubletree Club Hotel, Austin, TX, May 24, 2005.
- 108) Invited Presentation. High school professional development through community colleges and universities: a perspective, Annual meeting Seamless Transitions State Conference, Austin Convention Center, Austin, (presented twice) March 28-30, 2005.
- 109) Invited Presentation. Dynamic models in politics, colloquium at Prairie View A&M, Prairie View, TX, March 15, 2005.
- 110) Invited Presentation. Using and Validating a Triadic Instrument to Survey Pre-Service Teacher Preferences, 2005 Annual Meeting of the Southwest Educational Research Association (SERA), New Orleans, February 9-12, 2005.
- 111) Invited Presentation. The history of early calculating devices, including the slide rule. San Jacinto College North Annual Math Conference, Houston, TX, November 13, 2004.
- 112) Invited Presentation. Math Star: Supporting Middle School Mathematics
Presentation by Amanda Ross Dr. Don Allen
Dr. Deborah Jolly
Texas A&M University. San Jacinto College North Annual Math Conference, Houston, TX, November 13, 2004. (presented by Amanda Ross)
- 113) Panel Discussion, Member of Distance Education Panel for the Texas A&M Distance Education Day, November 3, 2004, Texas A&M University, College Station, TX. (panelist)

- 114) Invited Presentation. Tenth Annual October Pre service Mathematics Conference, Lakeway Inn and Resort, Austin, TX, October 28-30, 2004. Sponsored by the Charles A. Dana Center of The University of Texas, Austin, TX. (Session on October 29)
- 115) Invited presentation and organizer. ICTCM, (International Conference on Technology in Collegiate Mathematics) -All about Assessment Symposium, Chicago. Oct 28, 2004.
- 116) Panel discussion. ICTCM, (International Conference on Technology in Collegiate Mathematics) -All about Assessment Symposium, Chicago. Oct 28, 2004, wrap-up to all day assessment session.
- 117) Invited Presentation. Professional Development in Mathematics at Texas A&M. Math Star Coordinators meeting, Oct 18-19, 2004, Los Angeles, CA.
- 118) Invited Presentation. Regent's Initiative for Excellence in Education, Educator Perceptions of Mathematics/Science Teacher Preparation Programs, with Dianne Goldsby and Larry Kelly, May 26, 2004 Bush School, Texas A&M University.
- 119) Panel Discussion, Where should distance education at Texas A&M be?, sponsored by the Office of Distance Education and the TAMU Libraries, February 26, 2004, Evans Library, Texas A&M University. (panelist)
- 120) Presentation, Southwest Educational Research Association, "Pre-Service Teacher Perceptions of Mathematics and Science," Dallas, TX February 7, 2004, with Dianne Goldsby, Larry Kelly, and Dawn Parker.
- 121) Invited Presentation. ICTCM (International Conference on Technology in Collegiate Mathematics), Using Camtasia, Chicago. Oct 30, 2003.
- 122) Invited presentation. ICTCM, (International Conference on Technology in Collegiate Mathematics) -Panel discussion - What is the status of reform algebra?, Chicago. Oct 29, 2003.
- 123) Panel Discussion, Universal Design Day at Texas A&M University (MSC 206), October 9, 2003, Design of online mathematics materials and application of computer assisted design for students with disabilities. Sponsored by the Department of Student Life. (panelist)
- 124) Invited Presentation. Seventh Annual Conference on School-University Partnerships, Sept 28-30, 2003, San Antonio, TX - Educator Perceptions of Math and Science Teacher Preparation Programs, with Dianne Goldsby, Larry Walker, Dawn Parker.
- 125) Invited Presentation. TxDLA Regional Group Meeting, Visual mathematics - an exploration of new visual mathematics in the algebraic sciences, College Station, TX August 18, 2003. (TxDLA - Texas Distance Learning Association) 30 minutes.
- 126) Invited Presentation. CAMT (Conference for the Advancement of Mathematics Teaching), Math in the Movies, July 17, 2003.
- 127) Invited Presentation. 4th Annual Chancellor's Invitational Conference for The Academy for Educator Development , Using web based assessment and getting teachers involved at a laptop campus, with Lisa Stinson, St Agnes Academy. Houston, TX, June 12-14, 2003.
- 128) High School Presentation, May 12, 2003 College Station ISD, Math in the movies.

- 129) Panel Discussion, Let's Get Together: WWW-based Distance Education for Mathematics Teachers, NCTM, San Antonio, April 11, 2003. (panelist)
- 130) Invited Presentation. Science Technology and Youth Symposium, Math Goes to Hollywood, Texas A&M University, March 1, 2003. Invited Presentation. 4th Annual Chancellor's Invitational Conference for The Academy for Educator Development , Using web based assessment and getting teachers involved at a laptop campus, with Lisa Stinson, St Agnes Academy. Houston, TX, June 12-14, 2003.
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- 165) Invited Presentation. e-Learning in 2016, at the Math Education in 2016 conference, Helsinki, August 8-10, 2006.
- 166) Keynote Address . Old Technology, New Technology, Emerging Technology. What works and Why, Keynote address presented to HCC Title V Faculty Leadership Program - Math Workshop, October 20, 2006.
- 167) Invited Presentation. College Algebra Across Texas—Survey Results, presented at the Charles A. Dana Center’s Annual Mathematics and Science Higher Education Conference and Teacher Quality Higher Education Technical Assistance Meeting " Ensuring College Readiness in Mathematics and Science Higher Education," October 26-28, 2006; Lakeway Inn, Austin, TX
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- 170) Presentation - Using and Validating a Triadic Instrument to Survey Pre-Service Teacher Preferences, with Dianne Goldsby, 2007 Annual Meeting of the Southwest Educational Research Association (SERA), February 7-10, 2007, San Antonio, TX.
- 171) Presentation. The Triadic Survey in Building Capacity, with Dianne Goldsby, presented at the 7th Annual Texas A&M University Assessment Conference, February 22-23, 2007, College Station, TX.

- 172) Invited Presentation, Focus on College Algebra, presented at the TexMATYC Section of the TCCTA Annual Meeting, February 23-24, 2007, Austin, TX.
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- 175) Keynote Address. Multiple Representations - a journey to the future, at the "Aiming for Excellence in Mathematics Teacher Preparation, A Seminar for Teacher Educators," Math TEKS Connections, College Station, TX, May 18-20, 2007.
- 176) Presentation, Moving from High School Mathematics to College Mathematics. What's going on?, with Linda Zientek, Mel Griffin, Jim Wohlgehagen, Jacqueline Weilmuenster, CAMT (Conference for the Advancement of Mathematics Teaching), Henry B. Gonzales Convention Center, San Antonio, TX, June 28-30, 2007.
- 177) Presentation, All About Quadratics - for the Teacher, CAMT (Conference for the Advancement of Mathematics Teaching), Henry B. Gonzales Convention Center, San Antonio, TX, June 28-30, 2007.
- 178) Keynote Address. Technology in Math Education at Texas A&M University, JEM - Workshop on New and Emerging Technologies in Math Education, Helsinki, August 17-18, 2007.
- 179) Invited Address. Course redesign at TAMU, presented to the Texas Association of Academic Administrators in Mathematical Sciences (TAAAMS), at Baylor University, Waco, TX, October 13, 2007.
- 180) Panel Presentation, University Interface with Community Colleges to Ensure Success of Transfer Students through the NSF GK-12 Program, at the Southwest Regional NSF GK-12 Conference College Station, Texas with Mel Griffin, Bob Brick, Claudia Davis, Alice Sessions; Representing GK-12 Programs: G. Donald Allen, Jan Snyder, Kate Miller, Nancy Moreno, G. Donald Allen - moderator, November 9-10, 2007
- 181) Invited Presentation, Placement Examinations, presented at the JEM, Joining Educational Mathematics, an EU-funded thematic network for Mathematics Education, January 31 - February 2, 2008.
- 182) Invited Presentation. Triadic measurements of pre-service teachers, presented at the Southwest Educational Research Association annual meeting, February 6-8, 2008.
- 183) Invited Presentation. Placement Examinations at Texas A&M University, presented at the JEM, Joining Educational Mathematics, an EU-funded thematic network for Mathematics Education, Universitat Politècnica de Catalunya Facultat de Matemàtiques i Estadística (FME) Carrer Pau Gargallo, 5, Barcelona, Spain, January 31 - February 2, 2008.
- 184) Keynote Address. e-learning in the 21st Century , presented to the South Texas Mathematics Consortium (STMC), 16th Annual Meeting of Faculty and Students, Texas

A&M Kingsville, February 9, 2008.

- 185) Invited Presentation, Technology in the schools - a survey, ICTCM annual meeting, San Antonio, TX, March 6-8, 2008. Organizer of special session of technology in the schools.
- 186) Keynote Address. What Colleges want and What Colleges Get, presented to the Cengage Assessment Workshop, Microtek Training Facility, Dallas, TX, March 14, 2008.
- 187) Invited presentation (special session), Misconceptions in Mathematics Understanding, AMS Regional Meeting, 2008 Spring Southeastern Meeting Louisiana State University, Baton Rouge, LA, March 28-30, 2008. cancelled due to illness.
- 188) Presentation, Misconceptions in Mathematical Understanding, CAMT (Conference for the Advancement of Mathematics Teaching), San Antonio, TX, July 9-11, 2008, with S. Scarborough.
- 189) Keynote Address. Teaching mathematics: What work, what doesn't work and why. Fall Faculty Forum, TAMU-Galveston, Galveston, TX, August 22, 2008.
- 190) Invited Presentation, Administrative Leadership for TEKS and TAKS Mathematics, presented to Administrators Guide to Increasing Achievement in Math, Education Service Center VI, September 26, 2008.
- 191) Presentation, SERA (Southwest Educational Research Association), Pre-Service Teacher Perceptions of Teaching Fractions through a Survey, Essay, and Mathematical Misconceptions, February 4-7, 2009.
- 192) Invited Presentation, What is the National Math Panel and how does it affect the colleges? TexMATYC, Texas Mathematical Association of Two-Year Colleges), Friday, February 20, 2009
- 193) Presentation, Pre-Service Teacher Perceptions of Teaching Fractions through a Survey, Essay, and Mathematical Misconceptions, ICTCM (International Conference on Technology in Collegiate Mathematics, March 12-15, 2009.
- 194) Presentation, Assessing Perceptions through a Technology-Mediated Triadic Survey Instrument, Association of Teacher Educations, Reno, NV, August 1-5, 2009, with Dianne Goldsby.
- 195) Invited Presentation, Mathematical Power Models, University of Sao Paulo, Sao Paulo, Brazil, February 8, 2010.
- 196) Invited Presentation, Aspects of the TAMU Mathematics Placement Exam, University of Turino, Turino, Italy, March 1, 2010.
- 197) Invited Presentation, Integrating the CCRS into Academic Courses, at the TAMU Collaborative Summer Institute, College Station, TX, June 23, 2010.
- 198) Invited Presentation, TAMU Mathematics Placement Exam, at the NSF TAMU System Engineering Grant Meeting, College Station, TX. March 11, 2010 and April 21, 2010.
- 199) Poster, Retention through Remediation: Enhancing Success in Calculus I, at the NSF meeting, Identifying, Implementing and Integrating Best Practices, Washington, DC, March 3-5, 2010.

- 200) Invited Presentation, Mathematics, Technology, and Mathematics Education, University of Nairobi, Kenya, August 13, 2010.
- 201) Invited Presentation. Huang, R., Li, Y., Kulm, G., & Allen, D. (Accepted). Pre-service mathematics teachers' knowledge for teaching algebra in China and the U.S. American Education Research Association (AERA), April 8 –12, 2011, New Orleans, Louisiana.
- 202) Invited Presentation. Mathematics Content, WEPS and STACK Meeting, Exactum Building, University of Helsinki, Helsinki, Finland, August 2-5, 2011.
- 203) Invited Presentation. A Study of Pre-Service Teacher Perceptions of Ability to Use Technology, Dianne Goldsby, Robin Rackley, & G. Donald Allen–Texas A&M University, Southwest Educational Research Association, Menger Hotel, San Antonio, Texas February 2-5, 2011.
- 204) Presentations. Visual Algebra, Presented to AP pre-Calculus Institute, College Station, TX, July 8, 2011, Masters program at Texas A&M University, Presented to the AP Calculus Institute, College Station, TX, July 15, 2011.
- 205) Presentation, Personalized Before Calculus Program, ICTCM Annual meeting, March 21-24, 2012, with S. Nite, J. Whitfield, S. Sledge.
- 206) Invited Presentation, "A Fast and Furious Bridge to Calculus II – ONLINE!," AMATYC 40th Annual Conference, Gaylord Opryland Resort in Nashville, TN, November 13-16, 2014, with Sharon Sledge .
- 207) Invited Presentation, Impossible Problems and MOOCs, ICTCM (International Conference on Teaching Collegiate Mathematics) 26th annual meeting, March 21-23, 2014.
- 208) Invited Presentation, Student Characteristics That Help Predict Success in Calculus: Results from a Summer Precalculus Program, ICTCM (International Conference on Teaching Collegiate Mathematics) 26th annual meeting, with Sandra Nite, March 21-23, 2014.
- 209) Invited Presentation, "Personalized Precalculus Program – A Summer Bridge Program", TCCTA Annual Meeting, San Antonio, TX, February 7, 2014.
- 210) Invited Presentation, Using a bridging program for Calculus Instruction, North Carolina State, January 15, 2014.
- 211) Invited Presentation, Pre-session, presented to the pre-session of the ICTCM (International Conference on Teaching Collegiate Mathematics) in San Antonio, March 7, 2013. All day workshop.
- 212) Invited Presentation, "A Fast and Furious Bridge to Calculus II – ONLINE!," AMATYC 40th Annual Conference, Gaylord Opryland Resort in Nashville, TN, November 13-16, 2014, with Sharon Sledge .
- 213) Invited Presentation, Impossible Problems and MOOCs, ICTCM (International Conference on Teaching Collegiate Mathematics) 26th annual meeting, March 21-23, 2014.
- 214) Invited Presentation, Student Characteristics That Help Predict Success in Calculus: Results from a Summer Precalculus Program, ICTCM (International Conference on

- Teaching Collegiate Mathematics) 26th annual meeting, with Sandra Nite, March 21-23, 2014.
- 215) Invited Presentation, "Personalized Precalculus Program – A Summer Bridge Program", TCCTA Annual Meeting, San Antonio, TX, February 7, 2014.
 - 216) Invited Presentation, Using a bridging program for Calculus Instruction, North Carolina State, January 15, 2014.
 - 217) Invited Presentation, Presession, presented to the presession of the ICTCM (International Conference on Teaching Collegiate Mathematics) in San Antonio, March 7, 2013. All day workshop.
 - 218) Invited Presentation, MOOCs and what they imply, TCCTA annual meeting in San Antonio, TX, February 7, 2014.
 - 219) Invited Presentation, The Precalculus Program, North Carolina State University, November 20, 2013.
 - 220) Invited Presentation (via Webinar), Advancing an Online Project in the Assessment and Effective Teaching of Calculus, with Mika Seppala and Eamonn Kelly, November 14, 2013. [The meeting is held in Adobe ConnectPro on Thursday 14 November, 18:00-19:00 EEST (Finland)/08:00-09:00 (California, USA)]
 - 221) Invited Presentation, Understanding the predictive results of testing, University of Sao Paulo, Brazil, November 12, 2013.
 - 222) Invited Presentation. Understanding MOOCs and online delivery, NSF SAVI conference on big data, October 24-27,2013, Helsinki, Finland.
 - 223) Invited Presentation, Misconceptions in Mathematics, Teacher Quality Annual Technical Meeting, Lost Pines, Resort, Bastrop, TX, April 2, 2013,
 - 224) Invited Presentation, Triadic Surveys on Teacher Preparation, ICTCM (International Conference on Teaching Collegiate Mathematics) annual meeting, March 23, 2013.
 - 225) Invited Presentation, Math Assessment Testing, ICTCM annual meeting, March 22, 2013.
 - 226) Invited Presentation. Assessment and Teaching, NSF SAVI meeting, Tallahassee, FL, March 14-15, 2013.
 - 227) Invited Presentation. Innovations and Learning in Education, sponsored by the NSF-SAVI USA-Finland program and the Finnish TEKES program, October 11-13, 2012.
 - 228) Using a bridging program for Calculus Instruction, North Carolina State, January 15, 2014.
 - 229) "Personalized Precalculus Program – A Summer Bridge Program", TCCTA Annual Meeting, San Antonio, TX, February 7, 2014.
 - 230) Impossible Problems and MOOCs, ICTCM (International Conference on Teaching Collegiate Mathematics) 26th annual meeting, March 21-23, 2014.
 - 231) Student Characteristics That Help Predict Success in Calculus: Results from a Summer

Precalculus Program, ICTCM (International Conference on Teaching Collegiate Mathematics) 26th annual meeting, with Sandra Nite, March 21-23, 2014.

- 232) Invited Presentation, "A Fast and Furious Bridge to Calculus II – ONLINE!," AMATYC 40th Annual Conference, Gaylord Opryland Resort in Nashville, TN, November 13-16, 2014, with Sharon Sledge .
- 233) Invited Presentation, A Bridge to Engineering: A Personalized Precalculus (Bridge) Program, Frontiers in Education, October 21-24, 2015, El Paso, TX, with Sandra Nite, Jim Morgan, Robert Capraro.
- 234) Contributed Presentation, Confusion Matrices and Preservice Teacher Knowledge, ICTCM (International Conference on Teaching Collegiate Mathematics, March 13-15, 2015, Las Vegas, NV, with Dianne Goldsby.
- 235) Contributed Presentation, The End of Computing, ICTCM (International Conference on Teaching Collegiate Mathematics, March 13-15, 2015, Las Vegas, NV.
- 236) Invited Presentation, "A Fast and Furious Bridge to Calculus II – ONLINE!," AMATYC 40th Annual Conference, Gaylord Opryland Resort in Nashville, TN, November 13-16, 2014, with Sharon Sledge. Also presented at ICTCM (International Conference on Teaching Collegiate Mathematics, March 13-15, 2015, Las Vegas, NV.
- 237) Poster Session, The Impact of Placement Exams on Retention for Engineering Mathematics, ICTCM (International Conference on Teaching Collegiate Mathematics, March 13-15, 2015, Las Vegas, NV, with Mike Pilant and Jennifer Whitfield.
- 238) Invited Presentation, Online courses in economics, a primer, International Business School of New York, September 24-27, 2014.
- 239) Invited Presentation, "Understanding Distance Education", European School of Economics, August 12-17, 2014
- 240) Invited Presentation, "Increasing Calculus II Success with a Bridging Program," 2014 Hawaii University International Conference, June 10-12 at the Ala Moana Hotel, with Sandra Nite.
- 241) Invited Presentation, Student Characteristics That Help Predict Success in Calculus: Results from a Summer Precalculus Program, ICTCM (International Conference on Teaching Collegiate Mathematics) 26th annual meeting, with Sandra Nite, March 21-23, 2014.
- 242) Invited Presentation, "Personalized Precalculus Program – A Summer Bridge Program", TCCTA Annual Meeting, San Antonio, TX, February 7, 2014.
- 243) Invited Presentation, Using a bridging program for Calculus Instruction, North Carolina State, January 15, 2014.
- 244) Invited Presentation, MOOCs and what they imply, TCCTA annual meeting in San Antonio, TX, February 7, 2014.
- 245) Attended, Teacher Quality Grants annual meeting, The Hyatt Regency Lost Pines Resort and Spa, 575 Hyatt Lost Pines Road, Lost Pines, TX, US, March 27-28, 2014.
- 246) Panel Discussion, III-12 Improving Student Success in Foundational Courses in Math, with Denise Hayman, Northern Illinois University; Ivan Lopez, Northern New Mexico College; NSF STEP 2014 Annual Meeting, Washington DC, March 5-7, 2014,
- 247) Invited Presentation, A Bridge to Engineering: A Personalized Precalculus (Bridge) Program, Frontiers in Education, October 21-24, 2015, El Paso, TX, with Sandra Nite, Jim Morgan, Robert Capraro.
- 248) Contributed Presentation, Confusion Matrices and Preservice Teacher Knowledge, ICTCM (International Conference on Teaching Collegiate Mathematics, March 13-15, 2015, Las Vegas, NV, with Dianne Goldsby.

- 249) Contributed Presentation, The End of Computing, ICTCM (International Conference on Teaching Collegiate Mathematics, March 13-15, 2015, Las Vegas, NV.
- 250) Invited Presentation, "A Fast and Furious Bridge to Calculus II – ONLINE!," AMATYC 40th Annual Conference, Gaylord Opryland Resort in Nashville, TN, November 13-16, 2014, with Sharon Sledge. Also presented at ICTCM (International Conference on Teaching Collegiate Mathematics, March 13-15, 2015, Las Vegas, NV.
- 251) Poster Session, The Impact of Placement Exams on Retention for Engineering Mathematics, ICTCM (International Conference on Teaching Collegiate Mathematics, March 13-15, 2015, Las Vegas, NV, with Mike Pilant and Jennifer Whitfield.
- 252) Invited Presentation, The Remarkable Number One, 8th Annual International Conference on Mathematics & Statistics: Education & Applications, Athens, Greece, July 1-2, 2014.
- 253) Invited Presentation, Online courses in economics, a primer, International Business School of New York, September 24-27, 2014.
- 254) Invited Presentation, "Understanding Distance Education", European School of Economics, August 12-17, 2014
- 255) Invited Presentation, Impossible Problems and MOOCs, ICTCM (International Conference on Teaching Collegiate Mathematics) 26th annual meeting, March 21-23, 2014.

ONLINE BOOKS

- Linear Algebra - http://www.math.tamu.edu/~dallen/m640_03c/readings.htm
- History of Mathematics - http://www.math.tamu.edu/~dallen/masters/hist_frame.htm
- WebCalC – an online calculus course - <http://www.math.tamu.edu/~webcalc/webcalc.html>

PROFESSIONAL DEVELOPMENT SERIES – MATERIALS FOR TEACHERS AND K-12 STUDENTS

- All about fractions - for the teacher, <http://disted6.math.tamu.edu/fractions/index.htm>
- All about quadratics - for the teacher, <http://distance-ed.math.tamu.edu/quadratics/index.htm>
- Visual Algebra - teaching algebra using visual tools, <http://distance-ed.math.tamu.edu/techttools/v algebra/v algebra.htm>
- Fractions, Measurement, and Proportion - for the teacher, <http://disted6.math.tamu.edu/mpf/index.htm>

OTHER TALKS

- Poster Session. joint with Lisa Stinson, Female Students' Performance on and Preference for Computer-Delivered vs. Scantron Tests, 2003 Joint Conference Information Technology in Science (ITS) Center for Teaching and Learning Southwest – Association for the Education of Teachers in Science, March 1, 2003. (given by Stinson) Ft. Worth, TX.
- Panel Discussion, Universal Design Day at Texas A&M University (MSC 206), October 9, 2003, Design of online mathematics materials and application of computer assisted design for students with disabilities. Sponsored by the Department of Student Life, TAMU.

- College of Science, TAMU - Open House, September 6, 2003, presentation on distance education, online masters of mathematics program.
- Math Camp - presentation to 45 junior high school students on the use of mathematics in Hollywood produced movies, July 11, 2003, College Station, TX.
- Philosophy Group - presentation to a group of philosophers and sociologist on the application of Flash to interactive logic proofs, June 2, 2003, College Station, TX
- ITWG - Information Technology Working Group, Using Flash MX for teaching science - Texas A&M University, October 1, 2002.
- Invited Presentation. Science Technology and Youth Symposium, Math Goes to Hollywood, March 1, 2003.
- Poster Session. joint with Lisa Stinson, Female Students' Performance on and Preference for Computer-Delivered vs. Scantron Tests, 2003 Joint Conference Information Technology in Science (ITS) Center for Teaching and Learning Southwest –Association for the Education of Teachers in Science, March 1, 2003. (given by Stinson)

OTHER WRITINGS - ADDITIONAL

- The following have appeared in *Focus on Mathematics Pedagogy and Content* - a newsletter for math teachers. See: <http://disted6.math.tamu.edu/newsletter/>
 - The Caesar Cypher, Volume 1, Number 1 January, 2009
 - How big is infinity?, Volume 1, Number 2, February, 2009
 - Problems in Mathematical Recreation Volume 1, Number 4, May 2009
 - The Mystery of the New "Planet" (Or How Regression Saved the Day) Volume 1, Number 5, June 2009
 - Early PI -- Part I, Volume 1, Number 8, September 2009
 - What Technology Works for Teaching Mathematics and Why - A Perspective, Part I, Volume 1, Number 9, October 2009
 - What Technology Works for Teaching Mathematics and Why - A Perspective, Part II, Volume 1, Number 10, December 2009
 - Primes, Perfect Numbers, and Magic Numbers (Just for Fun), Volume 2, Number 8 October 2010
 - Geometry meets Algebra — Super-Conic Constructions, Part I Volume 2, Number 9 November 2010
 - Geometry meets Algebra — Super-Conic Constructions, Part II, Volume 2, Number 10 December 2010
 - Working Together - The Math Part, Volume 3, Number 5 July 2011
 - Principals as Leaders and Decision Makers in Mathematics Instruction, Part I, Volume 3, Number 7 September 2011
 - Why Study Math when I Have Technology? Volume 4, Number 2, April 2012
 - Optimization problems – with and without calculus, to appear.
- Geometry Applets, a collection of Flash interactive applets for high school geometry, May 2007.
- Misconceptions in Algebra, September 2006.
- Problem Solving for Teachers, April, 2007.
- Multiple Representations for Pre-service Teachers, April, 2007.
- Tech Tools, Tools that make teaching mathematics with technology easier, a college of

- numerous math technology tools including Maple, Excel, and Flash. 2005.
- Workshop on Fractions, Proportion, and Measurement, including content, PowerPoint lessons, 5E pedagogy, Lesson plans, etc. for the Pasadena Independent School District , 2005.
 - All about Quadratics - for the Teacher, 2005
 - Collected mathematics essays for teachers, in the MathStar-Texas Newsletter, 2004-2005
 - Pre-calculus - course-in-a-box, for professional development, 2004
 - Flash online workshop, a collection of Flash applications on mathematical topics, 2002-2005.
 - Developed specialty programs for teachers and students including Digitizer. Software:(<http://www.math.tamu.edu/dallen/digitalcam/index.htm>)
 - Math goes to Hollywood (<http://www.math.tamu.edu/dallen/hollywood/mathindex.htm>)
 - Understanding Statistics visually, Software: (<http://www.math.tamu.edu/dallen/flash-demo/index.htm>)
 - Physics animations. Getting the physics right, Software:(<http://www.math.tamu.edu/dallen/physics/index.htm>)
 - Digitizer software and website. Using digitization software to explore mathematics topics. ©2002-03. (<http://www.math.tamu.edu/dallen/digitalcam/index.htm>)
 - MATLAB and Maple models for physics. A part of the Information Technology Center summer institute for education leaders. Online. <http://www.math.tamu.edu/dallen/its>
 - Preparing a Quiz using the Template, JavaScript Quiz Templates - a collection of JavaScript feedback quizzes with directions for creating new quizzes. Fully integrated and self-quiz reproducing. August 2001.(<http://www.math.tamu.edu/dallen/mq14/quizmaker14.htm>)
 - Preparing a Quiz using the Template, JavaScript Quiz Templates - a collection of JavaScript feedback quizzes with directions for creating new quizzes. The user needs only have a text editor to create such quizzes. All the JavaScript has been written, Fall 2000. (<http://www.math.tamu.edu/dallen/mq14/quizmaker14.htm>)
 - Lectures on the History of Mathematics, a continuing web-based project which is updated and used annually. This project has been linked by several online history of mathematics websites, 1996-2001.
 - Online Masters of Mathematics Home page, 1999 URL: www.disted6.math.tamu.edu.
 - WebCalC, an online calculus course, 1998-2000. Home page URL: www.math.tamu.edu/~webcalc/webcalc.html
 - Java Script-based quizzing, 1999. URL: www.math.tamu.edu/dallen/cshsframe.htm
 - The History of π , 1998, URL: www.math.tamu.edu/~dallen/pi/pi.html
 - Math/Science Online Newsletter, Winter 1999/2000.
 - Math/Science Online Newsletter, Summer 1999.
 - Math/Science Online Newsletter, Two Faces of the Internet, December 1999.
 - The History of Infinity, June 1999. (A part of the History of mathematics project. 22 pages).
 - The WebCalC Newsletter, Summer 1998.
 - The WebCalC Newsletter, Winter 1998.
 - Why is Pete Sampras so Good? 1997.
 - A First Encounter with Scientific Notebook, a primer for use in workshops.
 - Would you like to have a war? (An analysis and computer simulation of a card game.)

- The Pythagoreans and the Primes. appeared in the Right Angle, 1997.
- A TAAS like Testing Environment, Exit Level , 1997.
- Computer Codes for General Two Dimensional Transport Problems, 1997.
- Stability of a Class of Self-Organizing Systems, 1991.
- System Impact of Hit Assessment Capability for NPB Discrimination, with Paul Nelson, Robert D. Jarvis, and Walter C. Daugherty, 1990

CURRENT AND PROJECTED RESEARCH

I am actively engaged in mathematical research in a several directions. First I am continuing a long time effort in the direction of dynamical systems related to cooperative-competitive systems. This work is centered on stability theory for nonlinear differential systems. In another direction, I am working on numerical methods for the solution of first order hyperbolic partial differential equations that arise in transport theory. We have already discovered an interesting class of methods based on orthogonal projections in distinction to moments-balance equations. Finally, I am continuing my study of diffusion through porous media. In particular, we are studying extreme short term behavior of one and two dimensional diffusion equations where the diffusion coefficient is not differentiable and the boundary condition involve a type of boundary layer.

ONLINE COURSES DEVELOPED

- Math 609 - Numerical Analysis - an online course (Fall 2005)
- Math 664 - Theory of Assessment - an online course (Summer 2004)
- Math 689 - Communications and Technology in Mathematics II. Mathematics of assessment. (May 2004)
- Math 646 - Problems in Mathematics II - online version. (Spring, 2004)
- Math 645 - Problems in Mathematics - online version. (Fall, 2003-2004)
- Math 696 Communications and Technology. A course for graduate mathematics students on IT in mathematics. Topics include: Document preparation, computer algebra systems, graphics preparation, HTML, and JavaScript. 2000. (with Michael Pilant)URL: www.distance-ed.math.tamu.edu.
- Math WebCalC --- An online Calculus course. Home page URL: www.math.tamu.edu/~webcalc/webcalc.html
- Math 640 - online Linear Algebra, 2001-2002 Math 645 --- online Problems Survey I, 2002 Math 629 --- online, History of Mathematics, 1996-2003 Math 451 --- online, Differential Equations, 2003
- With a team of 3 other colleagues, I am developing a WEB based Math 151 course, titled WebCalC. WebCalC went online during the Spring 1998 semester. This is a continuing project, designed to ultimately produce a curriculum of online mathematics courses. The WebCalC Project is the development of a on-line calculus course at the beginning college or AP high school level. What does this mean? Nothing less than a fully comprehensive calculus course to be delivered over the Internet. WebMath is a collection of projects dedicated to produce an on-line mathematics curricula from algebra to differential equations. This is what we are about. We have a home page. (See funding.) Below I list some of my WebCalC-related visits and activities during the past calendar year. All visits were one to

three hours in length and were for the purpose of demonstrating and explaining WebCalc.

COMMUNITY COLLEGES – VISITATIONS FOR WEBCALC

- McClennan Community College, Waco, Buddy Powell, Randy Schormann, Dr Wayne Matthews
- Temple College, Waco, Cameron Neal, Charles Stout James Van Ness
- Central Texas College, Killeen
- Blinn College, Bryan, Mary Ellen Davenport
 - o HIGH SCHOOLS:
 - ♣ Bryan High, Eleanor Mueller
 - ♣ Consolidated, CS, Mary Selzer
 - ♣ Somerville HS, Ricky Cole
 - ♣ Caldwell HS, Debbie Stefka
 - o FOUR YEAR COLLEGES:
 - ♣ Texas A&M, College of Engineering, July 14, 1997, Karen Watson, Make McDermott, Lee Carlson, Lee Lowry, Larry Piper
 - o CONFERENCES:
 - ♣ Gulf Coast Consortium of Community Colleges, Houston (June 19-20, 1998) Workshop on SNB WebCalc
 - ♣ CAMT (Conference for the Advancement of Mathematics Teaching), San Antonio, TX July 22-24, 1998 WebCalc
 - ♣ ICTCM, 11th Annual International Conference on Technology in Collegiate Mathematics, Nov 19-22, 1998 WebCalc (two talks)
 - ♣ A Faculty Forum: Getting started using technology, Texas A&M University, August 25, 1998
 - o WORKSHOPS:
 - ♣ '98 Maple Workshop, TAMU, June, 26, 1998
 - ♣ AP Calculus Workshop, TAMU, July 1, 1998
 - o PUBLISHERS:
 - ♣ Wiley, Vernon Church, Steve Gideon
 - ♣ Brooks/Cole, Bob Evans TCI, Roger Hunter
 - ♣ Prentice-Hall, George Lobell
- Math 308, Differential equations with MAPLE, development of laboratory materials, Spring 1999 (see Web page)
- Math 629, History of Mathematics, development of a distance learning format for delivery in the first summer term, 1996, Spring 1996. (I had 8 students at UTB and 8 students at TAMU. Classes were conducted via the TTVN, Trans-Texas Video Conferencing Network.)

TEACHING

Regularly Scheduled Classes Taught

Math 646, Spring 2012 – Problem Survey II

Math 645, Fall 2011 – Problem Survey I

Math 646, Spring 2011 - Problems Survey II

Math 645, Fall 2011, Problems Survey I

Math 629, Fall 2010 - History of Mathematics
 Math 664, Spring 2010 - Theory of Assessment
 Math 629, Fall 2009 - History of Mathematics
 Math 646, Spring 2009 - Problems Survey II
 Math 645, Fall 2008, Problems Survey I
 Math 664, Summer 2008 Theory of Assessment
 Math 646, Spring 2008, T Problems Survey II
 Math 646, Spring 2007, Problems Survey II
 Math 696, Summer II, 2006, Mathematical Communications and Technology
 Math 664, Spring 2006, Mathematical Theory of Assessment
 Math 609, Fall 2005, Numerical Analysis
 Math 696, Summer 2005, Seminar in Applied Mathematics
 Math 664, Spring 2005, Seminar in Applied Mathematics
 Math 646, Spring 2005, Problems Survey II
 Math 645, Fall 2004, Problems Survey I
 Math 689, Summer, 2004, Mathematics of Assessment
 Math 696, Spring 2004 (an online course) Enrollment: 15
 Math 629, Spring 2004 (an online course) Enrollment: 15
 Math 646, Spring 2004, (an online course) Enrollment: 30
 Math 645, Fall 2003 (an online course) Enrollment: 26
 Math 640, Fall 2003 (an online course) Enrollment: 28 (two sections)*
 Math 451, Summer 2003 (an online course)* Enrollment: 15 (two sections)
 Math 629, Spring 2002 (an online course)* Enrollment: 36 (two sections)
 Math 640, Fall 2002 (an online course)* Enrollment: 21 (two sections)
 Math 645, Fall 2002 (an online course)* Enrollment: 24 (two sections)
 Math 629, Spring 2002 (an online course) Enrollment: 19 (two sections)
 Math 609, Fall 2001
 Math 640, Fall 2001 (an online course)*
 Math 696, Spring 2001 (an online course)*
 Math 142, Spring 2001
 Math 609, Fall 2000
 Math 151, Fall 2000 (an online course)
 Math 629, Fall 2000 (an online course)*
 Math 151, Summer 2000 (an online course)
 Math 629, Spring 2000 (an online course)*

* These courses were taught in dual mode, both in the classroom and online, with separate section numbers.

GRADUATE STUDENTS SUPERVISED AND GRAD COMMITTEES (SINCE 2003)

Served on 25 Ph.D. committees for other departments. Served on 130 Masters. Selected list of committees.

Chair of 60 masters committees. Co-chair two Phd committees. Online masters students graduating since 2004: Larry Musolino, Rebecca Moch, Talana Hamilton, Pamela Kimbrough, Aubrey Vasquez, Paula Whitman, Heather Caster Richard Frederick, Susan Vandiver, Richard Enderton, Barbara Nunley, Angela Milano, Heather Bergman, Allyn Leon, Vincent Jones, Julie

Merrill, Cynthia Mixon, Michelle Agriesti, Naomi Driscoll, Ilham El Saleh, Julie Seifert, Cameron Macky Thomas Davis, Ginger Walker, Rebecca Black, Thomas Gree, Jennifer Wellman, Molly Mason, De-Vonna Clark, Crystal Bartels, Cary Crawford, Craig Bridges, Masters: David Ames, Megan Pritchard Phd committees: Meixia Ding, Judy Taylor, Tamera Carter, Pavel Tsvetkov, Cathy Liu (STAT), Adeoti Taiwo Adediran, Lea Ellen Burch, Lea Ellen Burch, Laura Shea Busenlehner, Tamara Anthony Carter, Roger R. Contreras, Peter Verle Cornish, David Paul Craig, Qifeng Ding, Cathy Mariotti Ezrailson, Olivia Rodriguez Garcia, Mousavi Mir Jaafari, Kyoung Jin Lee, Kyoungjin Lee, Yingxue Liu, Guillermo Marquez, Obed Matus, Diem M. Nguyen, Bemini Hennadige Peiris, Bemini Hennadige Peiris, Armando Isaac Perez, Elsa Cantu Ruiz, Hossein Shirvani, Sharon Kaye Sledge, Judy Marie Taylor, Galina Valeryevna Tsvetkova, Pavel Valeryevich Tsvetkov, Yongzhe Xie, Jennifer Rolfes, Rongjin Huang (TLAC), Ling Wang (Stat), Megan Pritchard (NE), David Ames (NE), Kurt Bruggeman (Math), Brent Christianson (STAT), Jessica Wendling (MATH), Emily Housley (STAT), Danny Ralston (MATH), Mark A. Pitts (STAT), Amber Dean (STAT), Mark Barrish (MATH), Lisa Beatty (MATH), Joe Bilyard (MATH), William Bolton (MATH), Mark Butz (MATH), Jeff Cagle (MATH), Thomas Caulton (MATH), Scott Copperman (MATH), Stephen Dauphin (MATH), James Dinh (MATH), Eduardo Drucker (MATH), David Fleeger (MATH), Suzanne Fluke (MATH), Gail (Thorne) Freed (MATH), Kristen Hemmingway (MATH), Ashley Hubble (MATH), Neil Kalinowski (MATH), Marty Kellum (MATH), Jeremy Knight (MATH), Barbara Kunkel (MATH), Elizabeth Lambert (MATH), Kathryn Lemons (MATH), Luther Lessor (MATH), Luis Magallanes (MATH), Don March (MATH), Janell (Martin) Eck (MATH), Chris McDowell (MATH), Mark McKinnon (MATH), Chanin Monestero (MATH), Stephanie Nite (MATH), Adriana Nunez (MATH), Lisa Obrien (MATH), John Osborn (MATH), Stephanie Osinski-Rea (MATH), Sara Patterson (MATH), Erica Pesek (MATH), Susan Powell (MATH), Jason Prince (MATH), Julie Sarzynski (MATH), Anita Schneider (MATH), Matthew Seiders (MATH), Edward Sharkus (MATH), Deborah Shinaberry (MATH), Hyun Ho Song (MATH), Joshua Stevens (MATH), Jason Tepe (MATH), Eric Thompson (MATH), Janessa Tucker (MATH), Meghan Waterbury (MATH), Joshua Wilkerson (MATH), Joe Bilyard (MATH), Luther Lessor (MATH), Jeffrey Fetzner (MATH), Joseph Magagnoli (STAT), Alex Bessinger (STAT), Joel Galang (STAT), Jennifer Morse (STAT), Hung Tran (STAT)

APPENDIX: MATHEMATICS/EDUCATIONAL/TECHNOLOGY PROJECTS

(All collected through 2008; some overlap with the above is possible)

- Presta Digitization – a website dedicated to connecting digital images to mathematics and what you can do with a digital camera. <http://www.math.tamu.edu/~dallen/digitalcam/index.htm>
- Pre-calculus – course in a box for professional development. (http://distance-ed.math.tamu.edu/Precalculus_home/index.htm), written with a group of others.
- All About Quadratics - for the Teacher, <http://distance-ed.math.tamu.edu/quadratics/index.htm>
- All About Fractions - for the Teacher, <http://distance-ed.math.tamu.edu/fractions/index.htm>
- Math goes to Hollywood (<http://www.math.tamu.edu/~dallen/hollywood/index.htm>) - a selection of math examples from feature length Hollywood films. From comedy to drama, from K-6 level to 10-12 there are examples of how Hollywood movies occasionally feature some very interesting mathematics.
- WebCalc (<http://www.math.tamu.edu/%7Ewebcalc/webcalc.html>) - a fully online calculus course and related papers.
- JavaScript Geometry (<http://distance-ed.math.tamu.edu/mathtools/javageo/index.htm>) - a basic tutorial of geometry proofs with “unfolding” proof and discussion.
- Online TAAS questions (http://distance-ed.math.tamu.edu/mathtools/taas_quiz/index.htm) - covering the 13 objectives of the exit level TAAS (Texas Assessment of Academic Skills) examination with online multiple choice questions.
- Make-a-quiz (<http://www.math.tamu.edu/~dallen/mq14/quizmaker14.htm>) - a simple to use generator of self-grading quizzes for teachers of all subjects.
- ICTCM short course on using the Web for mathematics instruction - complete lecture notes and demos <http://distance-ed.math.tamu.edu/techtools/workshop/index.htm>
 - Basic HTML – a tutorial on basic HTML language (<http://distance-ed.math.tamu.edu/techtools/workshop/HTML.html>)
 - Using Dreamweaver- a tutorial on using the HTML editor Dreamweaver 4 (<http://distance-ed.math.tamu.edu/techtools/workshop/htmleditors/dw1.htm>)
 - Using FrontPage - a tutorial on using the HTML editor FrontPage 2000, http://distance-ed.math.tamu.edu/techtools/workshop/htmleditors/newweb/frontpage_basics.htm
- Using Excel and Visual Basic in the mathematics classroom - tutorial and examples of VBA code used within Excel, http://distance-ed.math.tamu.edu/techtools/workshop/excel_vba.htm
- Excel tutorials - <http://distance-ed.math.tamu.edu/techtools/workshop/excel/tutorials.htm>
- JavaScript (<http://distance-ed.math.tamu.edu/techtools/workshop/JavaScript.html>) - many examples of JavaScript applied to mathematics instructional settings
- Flash - numerous Flash animations with a mathematical theme. <http://distance-ed.math.tamu.edu/techtools/flash/index.htm>
- Math/Science Online Newsletter (<http://www.math.tamu.edu/ms-online/>) – a newsletter pertaining to Mathematics and science online.
- Flash demos on statistical theme. Toward a visual understanding of variance using animations and iconic communication. http://distance-ed.math.tamu.edu/techtools/flash/flash_examples/more_still/flash-demo/index.htm
- Talks - assorted talks on technology and e-Learning themes
 - Old Technology, New Technology, Emerging Technology. What works and Why, Keynote address presented to HCC Title V Faculty Leadership Program - Math Workshop, October 20, 2006.

- e-Learning in 2020, presented to the Information Technology Working Group (ITWG) seminar, September 12, 2006.
- e-Learning in 2016, presented at the Math Education in 2016 conference, Helsinki, August 8-10, 2006.
- ICTCM, (International Conference on Technology in Collegiate Mathematics) -Teaching higher mathematics courses online, Orlando, FL, March 16-20, 2006.
- Fractions, TAMU/TEA (Texas Education Agency)/PEIC (P-16 Educational Improvement Consortium), March 4, 2006.
- Pre-conference workshop Visual Algebra and Pre-calculus, (Six hour workshop), TexMATYC/TCCTA Conference. (Invited) Houston, TX February 23-25, 2006.
- Using and Validating a Triadic Instrument to Survey Middle School Children, 2006 Annual Meeting of the Southwest Educational Research Association (SERA), Austin, February 8-10, 2006.
- TAMU/Pasadena ISD, Fractions, Measurement and Proportion for professional development, Pasadena, TX, October 29, 2005.
- Teacher Quality Grants: High Schools, Community Colleges & Universities, a perspective. Seamless Transitions Annual Conference, with Sharon Sledge, March 30, 2005 .
- Twarted Innovations - the problems of distance education, presented to the Information Technology Working Group (ITWG), February 15, 2005
- "Test Item Dependencies", Bowling Green State University, December 2, 2005.
- RGVCTM (Rio Grande Valley Council on Teaching Mathematics), *MathStar materials and the TQA pre-calculus course-in-a-box* , McAllen, TX, November 19, 2005 (with Amanda Ross).
- "Using TQA Grants with Community Colleges", Charles A. Dana Center's Annual Mathematics and Science Higher Education Conference, Lakeway Inn and Resort, Austin, TX, November 17-19, 2005.
- The High-School - College Disconnect, *The Coastal Bend Mathematics Collaborative*, Corpus Christi, TX, November 14, 2005.
- TAMU/TEXMatyc (Texas Math Association of Two Year College), Maple for the Classroom, October 28, 2005.
- An In-Depth Study of Educator Perceptions of Mathematics/Science Teacher Preparation by Means of a Triadic Instrument and Interviews, presented at the Association for Teaching and Curriculum (**AATC**), (with Dianne Goldsby and Larry Kelly), Austin, TX, October 6-8, 2005.
- TAMU/Snook ISD, Using the TI-Navigator equipment, Snook, TX, October 15, 2005.
- TAMU/TEA (Texas Education Agency)/PEIC (P-16 Educational Improvement Consortium), Fractions, Measurement and Scaling for professional development, October 8, 2005.
- University of Idaho, Gateway Mathematics Group, Using Scientific Notebook and Camtasia, Moscow, ID, June 13-17, 2005.
- Maple - in the Classroom, an online workshop given to Texmatyc instructors, April 9, 2004.
- Precalculus Completely TEKS Aligned, CAMT (Conference for the Advancement of Mathematics Teaching), Adams Mark Hotel, July 11-13, 2005. (with P. Poage)
- Twarted Innovations - the problems of distance education, ITWG, February 15, 2005
- A brief outline of early calculating technologies. December 10, 2004
- Teacher Quality Type A - pre-caculus, Dana Center Preservice Conference , Oct 28, 2004.
- Maple - in the Classroom, an online workshop given to Texmatyc instructors, April 9, 2004.

- Precalculus Completely TEKS Aligned, CAMT (Conference for the Advancement of Mathematics Teaching), Adams Mark Hotel, July 11-13, 2005. (with P. Poage)
- Technology Retreat - Department of Mathematics, Texas A&M University, April 22, 2005
- Teacher Quality Grants: High Schools, Community Colleges & Universities, a perspective. Seamless Transitions Annual Conference, March 30, 2005 .
- Twisted Innovations - the problems of distance education, ITWG, February 15, 2005
- A brief outline of early calculating technologies. December 10, 2004
- Teacher Quality Type A - pre-caculus, Dana Center Preservice Conference , Oct 28, 2004.
- A crash course in assessment, ICTCM, Oct 27, 2004
- TxDLA presentation 8/18/03
- Flash Workshop - July 2003
- CAMT-2003 presentation - Math goes to Hollywood
- Visual algebra - toward enhanced visual cognition of algebra concepts
- Resources for Ordinary Differential Equations
- Demos for physics, more demos
- Maple tutorial - a short and basic tutorial on Maple

EXHIBIT F

EXHIBIT F

DECLARATION OF EXPERT WALTER C. DAUGHERITY

WALTER C. DAUGHERITY declares, under penalty of perjury, that the following is true and correct.

1. I am a Senior Lecturer Emeritus in the Department of Computer Science and Engineering at Texas A&M University and also a computer consultant to major national and international firms, as well as to government agencies, including classified work.
2. Prior to my retirement in 2019, I taught computer science and engineering at both the undergraduate and graduate levels for 37 years, the last 32 years being at Texas A&M University. Courses I developed and taught include courses in artificial intelligence, expert systems, programming and software design, quantum computing, and cyberethics.
3. I have published 26 research articles related to expert systems, fuzzy logic, noise-based logic, and quantum computing from over \$2.8 million in funded research projects, plus conference papers and other publications.
4. As a computer expert I have consulted for major national and international firms, including IBM Federal Systems Division, *New York Times*, *Washington Post*, *Los Angeles*

Times, Southwestern Bell Telephone, Fulbright & Jaworski (Houston), and Phonogram B.V. (Amsterdam), and also for government agencies such as Cheyenne and Arapaho Tribes of Oklahoma, Texas Department of Agriculture, U. S. Customs Service, and classified work.

5. Further details about my qualifications are included in my Curriculum Vitae attached as Exhibit A.

6. I have reviewed the reports by Edward Solomon furnished to me which mathematically analyze the June 14, 2022, Republican gubernatorial primary in Clark County, Nevada, as well as other races. In order to check results in those reports I downloaded the official election data posted by the Clark County Election Department at https://www.clarkcountynv.gov/government/departments/elections/past_elections.php.

7. In my expert opinion these reports overwhelmingly demonstrate clear and convincing evidence that the election results analyzed in these reports were not produced by accurate counting of the votes cast, but were instead artificially contrived according to a predetermined plan or algorithm.

8. The first key finding of the Edward Solomon reports for the June 14, 2022, Republican gubernatorial primary in Clark County, Nevada, is that certain ratios calculated from the mail-in and in-person totals, which should be independent, are in fact dependent. (Independent variables cannot be predicted from one another; for example, knowing that the time the first person in line at precinct 1 voted was at an even number of minutes past the hour, say 7:04 or 7:06 A.M., does not allow us to predict whether the first person in line at precinct 2 voted at an even number of minutes past the hour or an odd number of minutes past the hour.)

9. In this primary race, as in each election, votes for each candidate are reported in three categories: mail-in (absentee), early vote (in-person), and election day (in-person). Since

each voter choosing a particular candidate can vote in any of these three ways, the totals should be independent. For example, knowing how many mail-in and early in-person votes Joey Gilbert received does not provide enough information to know how many election day in-person votes he received. In other words, you could not bet on a particular exact number of election day in-person votes and expect to win the bet, since the exact number is unpredictable.

10. Since there were so many candidates in addition to Joey Gilbert, the following precinct analysis divides all the votes into two categories, “Lombardo” and “Gilbert et al.” Using the same variable names as in the Edward Solomon reports, and considering only votes prior to election day, let

a be Lombardo’s mail-in vote total,

b be Gilbert et al.’s mail-in vote total,

c be Lombardo’s early in-person vote total, and

d be Gilbert et al.’s early in-person vote total.

11. Clearly these numbers should be independent, that is, knowing some of the numbers should not allow exactly predicting the other numbers. For example, knowing that in precinct 1000, $b=13$, $c=21$, and $d=32$ should not allow an exact prediction of *a*, Lombardo’s mail-in vote total. In an honest and fair election we could only estimate that since Lombardo received $c/(c+d)=0.396226$, that is, 39.6% of the early in-person vote, we would expect that Lombardo would also receive about 39.6% of the mail-in vote, since the way people cast ballots does not influence their choice.

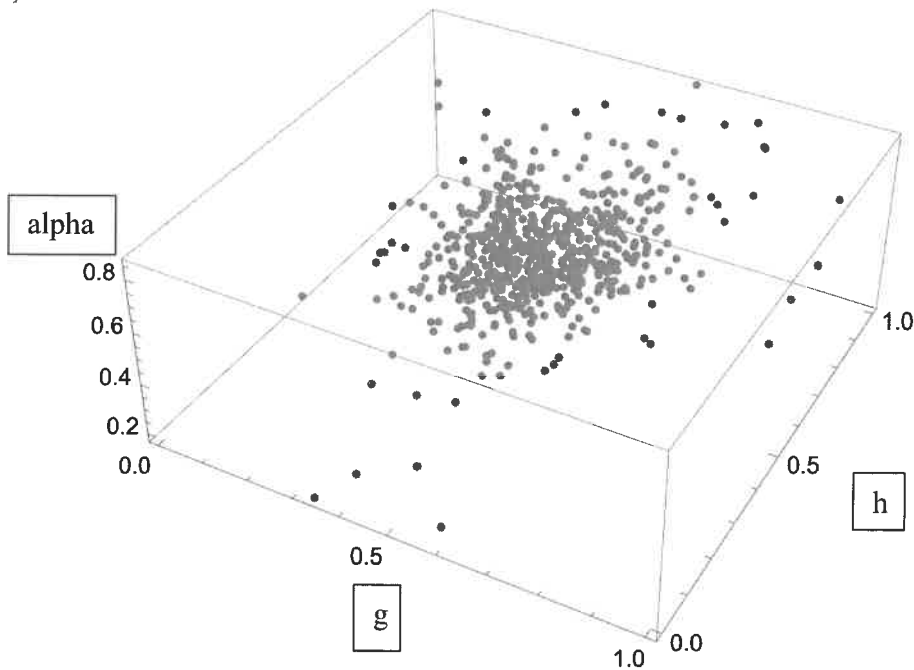
12. Solving $a/(a+b)=0.396226$ for *a* yields 21.53125, which rounds up to 22 votes. This estimate is only a “best guess,” and the true number of mail-in votes could be anything: 22, or higher, or lower, so a bet on 22 would only win once in a while, not very often.

13. However, in the June 14, 2022, Republican gubernatorial primary in Clark County, Nevada, the four numbers a , b , c , and d were not only not independent, as they should be in a fair and honest election, they were so tightly dependent that a can be exactly predicted from b , c , and d not only in precinct 1000 (yielding 25, *the exact number of mail-in votes for Lombardo*), but also is *every single precinct in the entire county!*

14. This is a total of 669 precincts with an exact prediction, omitting precincts with zero votes or missing data on the Clark County Elections Department's website. Note that 25, the actual count, is close to the estimate of 22, but not exact, whereas the dependent formula described next gives exactly 25.

15. I calculated the values Edward Solomon names g , h , and α for each ballot style (*i.e.*, split precinct) for this county, and graphed (g, h, α) as (x, y, z) , respectively, which produced the following graph, where each point is one precinct:

Out[]=

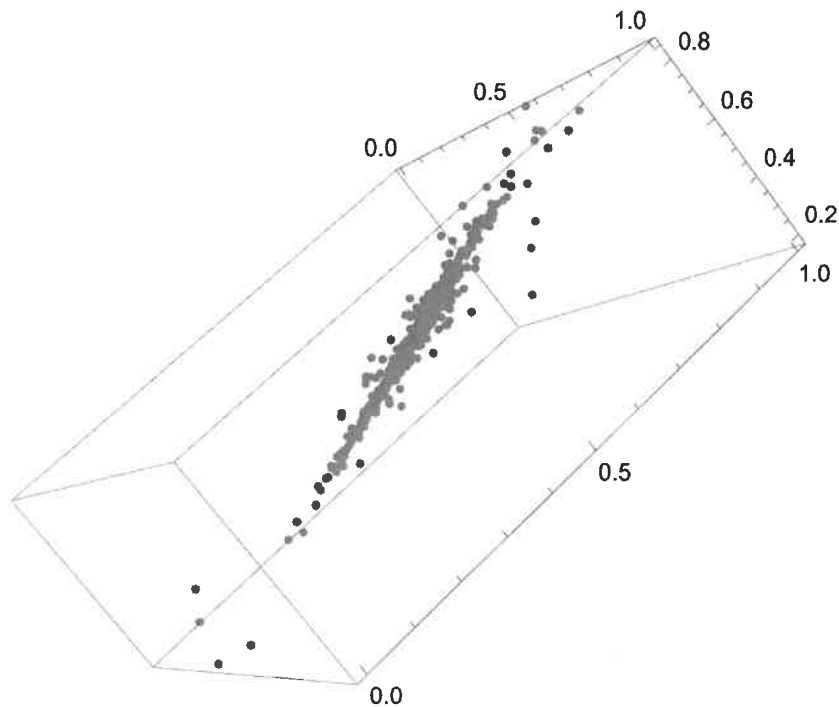


16. From the initial vantage point, the graphed data appears to be uncorrelated

(independent), as it should in a fair election, but by rotating the 3-dimensional graph it becomes clear that the points lie very close to a 2-dimensional plane, indicating strong correlation (dependence) which should not occur in a fair election.

17. Here is the same graph rotated to a different point of view, looking at the plane edge-on:

Out[]=



which of course looks like a line. This improper dependence confirms that the election results in the June 14, 2022, Republican gubernatorial primary in Clark County, Nevada, were artificially contrived.

18. Using the standard mathematical method of least-squares linear regression, the equation of the plane is

$$g = 0.01818144438 + 1.758536682 \alpha - 0.8083882873 h,$$

which is used in the following paragraphs.

19. As an example of how this improper dependence could be used to manipulate an

election, consider the following scenario: If *alpha* were hypothetically predetermined for each precinct in this 2022 Republican gubernatorial primary from this plane, then after the early in-person votes for candidate Lombardo are counted, and the mail-in and early in-person votes for Gilbert et al. are counted, the exact required mail-in vote for candidate Lombardo can be calculated *without counting*.

20. Specifically, the following procedure would *exactly* predict the required mail-in vote for candidate Lombardo *for nearly every single precinct in the county*:

Let *alpha* be the value for the precinct hypothetically predetermined from the plane,

b be Gilbert et al.'s mail-in vote total,

c be Lombardo's early in-person vote total, and

d be Gilbert et al.'s early in-person vote total.

Then Lombardo's mail-in vote count *a* is given exactly by the formula

$$a = \frac{(b+d)(1-\alpha)}{\alpha} - c, \text{ rounded to the nearest integer.}$$

21. For example, in precinct 1012 suppose *alpha* were hypothetically set in advance to 0.463855422 from the 2-dimensional plane described in ¶ 19 above. Then counting 95 mail-in votes for Gilbert et al. (*b*), 45 early in-person votes for Lombardo (*c*), and 59 early in-person votes for Gilbert et al. (*d*) and substituting those values into this formula gives *a* = 133, the exact required number of mail-in votes for Lombardo, *before those votes have even been counted*. After counting, mail-in ballots can be added or removed to adjust the total to the required 133.

22. In my expert opinion the foregoing calculations overwhelmingly demonstrate

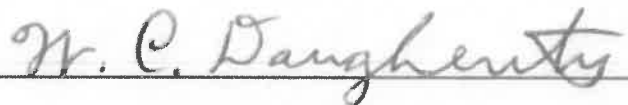
clear and convincing evidence that all of the election results analyzed above were not produced by accurate counting of the votes cast, but were instead artificially contrived according to the same (or a very similar) predetermined plan or algorithm.

23. Due to the prohibitive amount of calculation to accomplish this by hand, it is clear that computer software must have been used. Such manipulating software could be installed in a variety of ways, including vendor programming, operating system components, open-source or commercial off-the-shelf libraries, remote access, viruses or other malware, etc.

24. Unless and until future proposed electronic voting systems (including hardware, software, source code, firmware, etc.) are made completely open to the public and also subjected to scientific analysis by independent and objective experts to determine that they are secure from manipulation or intrusion, in my professional opinion as a computer expert, electronic voting systems should not even be considered for use in any future elections, as they cannot be relied upon to generate secure and transparent election results free from the very real possibility of unauthorized manipulation. My professional opinion as a computer expert is therefore that hand-marked hand-counted paper ballots should be used instead.

25. I have personal knowledge of the foregoing and am fully competent to testify to it at trial.

I declare under penalty of perjury that the foregoing is true and correct. Executed on July 14, 2022.



Walter C. Daugherty

EXHIBIT G

EXHIBIT G

EXHIBIT A

Curriculum Vitae of Walter C. Daugherty

Walter C. Daugherty
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College Station, TX 77845
(979) 845-1308 (Office)
Walter.Daugherty@post.Harvard.edu

EDUCATION

Ed.D., Mathematical Education, Harvard University, Cambridge, Massachusetts, 1977.
Dissertation: "On the Ordering of Topics in the Teaching of Mathematics."
Advisor: Marc Lieberman.

M.A.T., Mathematics, Harvard University, Cambridge, Massachusetts, 1967 (age 20).

B.S., Mathematics, Oklahoma Christian College, Oklahoma City, Oklahoma, 1966 (3 years). Minors: Physics and chemistry, German.

EXPERIENCE

- 1973 to present Daugherty Brothers, Inc., (Computer consultants),
Bethany, Oklahoma. Co-founder, chairman, and president.
Clients include IBM Federal Systems Division, New York
Times, Washington Post, Los Angeles Times, Cheyenne
and Arapaho Tribes of Oklahoma, Southwestern Bell
Telephone, Fulbright & Jaworski (Houston), Texas
Department of Agriculture, Phonogram B.V. (Amsterdam),
and U. S. Customs Service.
- 1987 to present Texas A & M University, College Station, Texas. Visiting
Assistant Professor/Senior Lecturer/Senior Lecturer Emeritus,
Departments of Computer Science and Engineering and
Electrical and Computer Engineering, College of Engineering.
- 1989-91 Texas A & M University System, College Station, Texas.
Director, Knowledge Systems Research Center, Computer
Science Division of the Texas Engineering Experiment
Station.

- 1984-87 Blinn College, Brenham, Texas. Computer science instructor. Part-time 1984-86, full-time 1986-87.
- 1978-80 Rose State College, Midwest City, Oklahoma. Data processing instructor (part-time).
- 1971-73 ECRM, Bedford, Massachusetts. Systems programmer.
- 1970-71 Harvard Computing Center, Cambridge, Massachusetts. Telecommunications specialist.
- 1969-70 Computer-Aided Instruction Laboratory, Harvard University, Cambridge, Massachusetts. Systems programmer.
- 1968-70 Harvard University, Division of Engineering and Applied Physics, Cambridge, Massachusetts. Teaching fellow (for George Mealy and Thomas Bartee).
- 1967 Driscoll Junior High School, Brookline, Massachusetts. Mathematics teacher.
- 1967 University of Oklahoma Medical Center Computing Facility, Oklahoma City, Oklahoma. Programmer.
- 1966 University of Central Oklahoma Data Processing Center, Edmond, Oklahoma. Programmer.
- 1965 Oklahoma Christian University of Science and Arts, Oklahoma City, Oklahoma. Statistical programmer.
- 1963 University of Oklahoma Computer Center, Norman, Oklahoma. Lab instructor.

RESEARCH AND DESIGN

1. Refereed Publications

Daughterity, W. C., and Kish, L. B., "More on the Reference-Grounding-Based Search in Noise-Based Logic," *Fluctuation and Noise Letters*, Vol. 21, No. 3, 2250023, 2022.

Kish, L. B., and Daughterity, W. C., "Entanglement, and Unsorted Database Search in Noise-Based Logic," *Applied Sciences*, Vol. 9, No. 15, 3029, 2019.

Kish, L. B., and Daugherty, W. C., "Noise-Based Logic Gates by Operations on the Reference System," *Fluctuation and Noise Letters*, Vol. 17, No. 4, 1850033, 2018.

Daugherty, W. C., and Coulson, R. N., "Knowledge Engineering for Sustainable Agriculture Management," *Proceedings of ICAST 2001 Conference* (Beijing, China, November 2001), 2:266, 2001.

Coulson, R. N., Saarenmaa, H., Daugherty, W. C., Rykiel, E. J., Saunders, M. C., and Fitzgerald, J. W., "A Knowledge System Environment for Ecosystem Management," book chapter in Klopatek, J. and Gardner, R. (eds.), *Landscape Ecological Analysis: Issues and Applications*, Springer-Verlag, 57-79, 1999.

Coulson, R. N., Daugherty, W. C., Rykiel, E. J., Saarenmaa, H., and Saunders, M. C., "The Pragmatism of Ecosystem Management: Planning, Problem Solving and Decision Making with Knowledge-Based Systems," *Proceedings of Eco-Inforna '96 Global Networks for Environmental Information Conference* (Lake Buena Vista, Florida, November 1996), 10:342-50, 1996.

Coulson, R. N., Fitzgerald, J. W. *, Daugherty, W. C., Oliveria, F. L., and Wunneburger, D. F., "Using Spatial Data for Integrated Pest Management in Forest Landscapes," *Proceedings of the 11th Conference on Geographic Information Systems: Integrating Spatial Information Technologies for Tomorrow* (Vancouver, British Columbia, Canada, 1997).

Daugherty, W. C.; Harris, C. E., Jr.; and Rabins, M. J., "Introducing Ethics and Professionalism in REU Programs," *Proceedings of the 1995 World Conference on Engineering Education* (Minneapolis, Minnesota, October 1995).

Coulson, R. N., Daugherty, W. C., Vidlak, M. D. *, Fitzgerald, J. W. *, Teh, S. H. *, Oliveria, F. L., Drummond, D. B., and Nettleton, W. A., "Computer-based Planning, Problem Solving, and Decision Making in Forest Health Management: An Implementation of the Knowledge System Environment for the Southern Pine Beetle, ISPBEX-II," *Proceedings of the IUFRO Symposium on Current Topics in Forest Entomology* (Maui, Hawaii), 1995.

Yen, J., Daugherty, W. C., Wang, H. *, and Rathakrishnan, B. *, "Self-Tuning and Self-Learning Fuzzy Systems," book chapter in Yen, J., Langari, R., and Zadeh, L. (eds.), *Industrial Applications of Fuzzy Logic and Intelligent Systems*, IEEE Press, 1995.

* Graduate Research Assistant I funded

Daugherty, W. C., Video review of *Introduction to Biological and Artificial Neural Networks for Pattern Recognition*, by Steven K. Rogers, in *IEEE Transactions on Neural Networks*, Vol. 5, No. 5, 1994.

Teh, S. H. *, Daugherty, W. C., and Coulson, R. N., "A User-Centric Methodology for Building Usable Expert Systems," *Proceedings of the 7th International Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems* (Austin, Texas, May-June 1994), 45-48, 1994.

Daugherty, W. C., "A Neural-Fuzzy System for the Protein Folding Problem," *Proceedings of the Third International Workshop on Industrial Fuzzy Control & Intelligent Systems (IFIS '93)* (Houston, Texas, December 1993), 47-49, 1993.

Daugherty, W. C., "A Partially Self-Training System for the Protein Folding Problem," *Proceedings of the World Congress on Neural Networks (WCNN '93)*, (Portland, Oregon, July 1993). Invited paper.

Yen, J., Wang, H. *, and Daugherty, W. C., "Design Issues of Reinforcement-Based Self-Learning Fuzzy Control," *Proceedings of the World Congress on Neural Networks (WCNN '93)*, (Portland, Oregon, July 1993).

Daugherty, W. C., "Characterizations of Fuzzy Operations," *Proceedings of the Second International Workshop on Industrial Fuzzy Control & Intelligent Systems* (College Station, Texas, December 1992), 234, 1992.

Yen, J., Wang, H. *, and Daugherty, W. C., "Design Issues of a Reinforcement-Based Self-Learning Fuzzy Controller for Petrochemical Process Control," *Proceedings of North American Fuzzy Information Processing Society* (Puerto Vallarta, December 1992), 1992.

Yen, J., Wang, H. *, and Daugherty, W. C., "An Adaptive Fuzzy Controller with Application to Petroleum Processing," *Proceedings of IFAC Workshop on Intelligent Manufacturing Systems* (Dearborn, October 1992), 1992.

Yen, J., Daugherty, W. C., and Rathakrishnan, B. *, "Fuzzy Logic and Its Application to Process Control," *Proceedings of CAPA Technology Conference* (Houston, May 1992), 78-86, 1992.

* Graduate Research Assistant I funded

Daughterity, W. C., Rathakrishnan, B. *, and Yen, J., "Performance Evaluation of a Self-Tuning Fuzzy Controller," *Proceedings of the IEEE International Conference on Fuzzy Systems (FUZZ-IEEE)* (San Diego, March 1992), 1992.

Daughterity, W. C., "An Application of Geometrical Reasoning to a Combinatorial Problem," *Proceedings of the Seventh Annual Conference on Applied Mathematics* (Edmond, Oklahoma, April 1991), pp. 226-232, 1991.

Daughterity, W. C., Review of *Data Communications Dictionary*, by Charles J. Sippl, in *Computing Reviews*, Vol. 17, No. 9, pp. 335-336, 1976.

Daughterity, W. C., "Circuits for Dial-up and Local Use of a Stand-alone PDP-8," *Proceedings of the Digital Equipment Computer Users Society*, Vol. 2, No. 2 (Los Angeles, December 1975), pp. 413-414, 1976.

Daughterity, W. C., Review of *Effective Use of ANS COBOL Computer Programming Language*, by Laurence S. Cohn, in *Computing Reviews*, Vol. 16, No. 10, p. 441, 1975.

Manwell, T., Daughterity, W., Desch, S., and Stolurow, L., "Tom Swift and His Electric Bilingual Grandmother," *ACM SIGCUE Bulletin*, Vol. 7, No. 1, pp. 5-17, 1973.

Daughterity, W. C., "A Telephone Amplifier," *Transactions of the Oklahoma Junior Academy of Science*, Vol. IV, pp. 130-132, 1961.

* Graduate Research Assistant I funded

2. Other Publications

Daughterity, W. C., "Honors Section," in Rabins, M. J., and Harris, C. E. Jr. (eds.), *Engineering Ethics Teaching Manual*, 1997.

Daughterity, W. C., "Honors Section," in Rabins, M. J., and Harris, C. E. Jr. (eds.), *Engineering Ethics Teaching Manual*, 1996.

Allen, G. D., Nelson, P., Jarvis, R. D., and Daughterity, W. C., "System Impact of Hit Assessment Capability for NPB Discrimination: Analysis of the Case of No-Hit Assessment," *Weapons Lab/TALN Technical Report*, Kirtland Air Force Base, May, 1990.

3. Other Conference Papers and Presentations

Coulson, R. N., and Daugherty, W. C., "A Knowledge Engineering Approach for Ecosystem Management," 11th Annual Landscape Ecology Symposium, International Association for Landscape Ecology - Integration of Cultural and Natural Ecosystems Across Landscapes: Applications of the Science, Galveston, Texas, 1996.

Coulson, R. N., and Daugherty, W. C., "Decision Support Systems for Forest Pests: Where Do All the Knowledge-Based Systems Go?", North American Forest Insect Work Conference, San Antonio, Texas, 1996.

Daugherty, W. C. and Coulson, R. N., SPBEBE (Economic and Environmental Impact Assessment for Southern Pine Beetle Suppression Projects), computer code, developed for the USDA Forest Service, Forest Health Protection, 1996-1997.

Coulson, R. N., and Daugherty, W. C., "Knowledge System Environment for Ecosystem Management," Global Studies Seminar, Battelle Pacific Northwest Laboratories, Richland, Washington, 1995.

Daugherty, W. C. and Coulson, R. N., ISPBEX-II (Integrated Southern Pine Beetle Expert System), computer code, developed for the USDA Forest Service, Forest Health Protection, 1994.

Daugherty, W. C., and Yen, J., "Tutorial on Neuro-Fuzzy Systems," Third International Workshop on Industrial Fuzzy Control & Intelligent Systems Houston, Texas, December 1993.

Daugherty, W. C., "Introduction to LISP with an On-line Demonstration," Houston Geotech '91, Houston, Texas, 1991.

Daugherty, W. C., "The Universal Classification Problem," South Central Regional Conference of the Association for Computing Machinery, Austin, Texas, 1984.

4. Research Projects

"Remote Laboratory Data Entry and Retrieval System," Texas Department of Agriculture, Walter C. Daugherty, 1986, \$3,000 (Daugherty 100%).

"Electrochemical Modeling of a Sinter Plate, Sealed Design Nickel-Cadmium (Ni-Cd) Battery Cell," National Aeronautics and Space Administration, Ralph E. White, Walter C. Daugherty, 1 graduate student, 1989, 25% of my salary 1989-90 (Daugherty 100%).

“Application of Reasoning under Uncertainty to Process Control,” Texaco, Walter C. Daugherty and John Yen, 1 graduate student; competitive and peer-reviewed, September 1990, \$18,000.

“Design of a Computational Classroom,” Texas A & M University, Walter C. Daugherty, September 1990-May 1991, \$60,000 (Daugherty 100%).

“Design of a Second Computational Classroom,” Texas A & M University, Walter C. Daugherty, January 1991-December 1992, \$153,000 (Daugherty 100%).

“Development of Honors Courses in Artificial Intelligence and Analysis of Algorithms,” Texas A & M University, Walter C. Daugherty, James Abello and Arkady Kanevsky, 2 graduate students, competitive, September 1991-May 1991, \$11,000 (Daugherty 50%).

“Integrated Southern Pine Beetle Expert System”; USDA Forest Service; Robert N. Coulson, Walter C. Daugherty, and Jeffrey W. Fitzgerald; 5 graduate students; competitive and peer-reviewed; 1985-1992, \$974,120.

“Distributed Data-Base Support for the ISPBE Expert System”; USDA Forest Service; Robert N. Coulson, Walter C. Daugherty, and Jeffrey W. Fitzgerald; 1 graduate student; competitive and peer-reviewed; 1992-93; \$35,000.

“Integrated Southern Pine Beetle Expert System II”; USDA Forest Service; Robert N. Coulson, Walter C. Daugherty, and Jeffrey W. Fitzgerald; competitive and peer-reviewed; March 1993-February 1994; competitive and peer-reviewed; \$170,000.

“Ecological Modelling of Regional Responses to Global Changes: A Knowledge System Environment for Planning, Problem-Solving and Decision Making”; Battelle Pacific Northwest Laboratory; Robert N. Coulson and Walter C. Daugherty; competitive and peer-reviewed; June-December 1995; \$39,996.

“Fitness of a Genetically Modified *Gliocladium virens* in Soil and Rhizosphere”; USDA Cooperative State Research Service; Charles M. Kenerley and Walter C. Daugherty; 1 senior associate, 2 graduate students, and 1 undergraduate student; competitive and peer-reviewed; September 1996-August 2001; \$254,450 (Daugherty 50%).

“Southern Pine Beetle Biological Evaluation and Economic Evaluation Program Conversion”; USDA Forest Service, Forest Health Protection; Robert N. Coulson (PI) and Walter C. Daugherty (Co-PI); competitive and peer-reviewed; 1996-1997; \$16,421.

“The Texas Imported Fire Ant Survey: The Fire Ant Spatial Information Management System (FASIMS)”; Texas Agricultural Experiment Station; Robert N. Coulson (PI) and S. Bradleigh Vinson, Maria D. Guzman, Douglas F. Wunneburger, and Walter C. Daugherty (Co-PI’s); competitive and peer-reviewed; January 1998-December 1998; \$50,000.

“Special Topics in Computer Science Concepts and Programming”; Academy for Advanced Telecommunications and Learning Technologies; Walter C. Daugherty; competitive and peer-reviewed; June 1998-May 1999; \$5,000 (Daugherty 100%).

“Object Modeling Techniques Support for National Simulation Center Tactical Directorate”; U. S. Army through prime contractor Cubic Applications, Inc.; Walter C. Daugherty, James A. Wall, and José Salinas; competitive; September 1998-April 1999; \$74,498 (Daugherty 20%).

“The Fire Ant Spatial Information Management System (FASIMS)”; Texas Department of Agriculture, Texas Imported Fire Ant Research and Management Plan; Robert N. Coulson (PI) and Douglas F. Wunneburger, S. Bradleigh Vinson, and Walter C. Daugherty (Co-PI’s); competitive and peer-reviewed; 1999-2001; \$220,000.

“Evaluating the Impact of Southern Pine Beetle on Ecologically Sustainable Forest Management”; USDA Forest Service; Robert N. Coulson and Walter C. Daugherty; 1 graduate student and 1 undergraduate student; competitive and peer-reviewed; 2000-2003, \$90,000.

“Honey Bee Initiative”; State of Texas; Robert N. Coulson (PI), Walter C. Daugherty (Consultant); 2 graduate students; competitive; September 2001-August 2002; \$40,000.

“Increasing Computer Science Retention by Developing and Deploying Self-Paced Learning Modules”; State of Texas; Jennifer Welch and Frank Shipman (Co-PI’s), Lawrence Petersen, Walter C. Daugherty, and Lauren Cifuentes (Key Personnel); 10 undergraduate students; competitive; June 2002-August 2004; \$422,692.

“Facilitating the Transition to Java in High School Computer Programming Classes”; Texas A&M University System Academy for Educator Development; Walter C. Daugherty; 1 graduate student; competitive and peer-reviewed; December 2003-September 2004; \$2,966 (Daugherty 100%).

“Instructional Technology Enhancements for Computer Teaching Labs,” Texas A&M University, Walter C. Daugherty, competitive, January 2004-August 2004, \$20,000 (Daugherty 100%).

“Increasing Computer Science Retention with Peer Teachers and Learning Modules”; State of Texas; Valerie Taylor and Jennifer Welch (Co-PI’s), Lawrence Petersen, Walter C. Daugherty, and Joseph Hurley (Key Personnel); undergraduate students; competitive; September 2004-August 2005; \$173,158.

Cumulative total: \$2,845,801

5. Research Proposals

Note: Funded proposals are listed in section 4 above.

“Automated Support for VLSI Standard Cell Optimization,” Texas Advanced Technology Program, Walter C. Daugherty, competitive and peer-reviewed, July 1989, not funded, \$233,887.

“Integration of Computer Software Models for NiCd Battery Design,” National Aeronautics and Space Administration, Ralph E. White and Walter C. Daugherty, competitive and peer-reviewed, 1990, not funded, \$125,000.

“Innovative Use of Supercomputers and Parallel Computers in Grades K-8,” Department of Energy, Paul Nelson, Walter C. Daugherty and Bahram Nassersharif, competitive and peer-reviewed, December 1990, preproposal submitted, \$885,000.

“Integration of Texas Junior Colleges into State and National Computer Networks,” Texas Advanced Technology Program, Walter C. Daugherty and Charles H. Beard, competitive and peer-reviewed, July 1991, not funded, \$174,219.

“Adaptive Fuzzy Control for Industrial Processes,” Texas Advanced Research Program, John Yen and Walter C. Daugherty, competitive and peer-reviewed, July 1991, not funded, \$177,064.

“Development of a Fuzzy Logic Tuner for a PID Controller,” Texaco, John Yen and Walter C. Daugherty, 1992-93, not funded, \$200,000.

“National Center For Ecological Analysis and Synthesis,” National Science Foundation; Robert N. Coulson, Walter C. Daugherty *et al.*, competitive and peer-reviewed, July 1994, not funded, \$10,000,000.

“Development of a Fungal Growth Model for Risk Assessment,” Texas Advanced Research Program, Charles M. Kenerley and Walter C. Daugherty, competitive and peer-reviewed, July 1995, not funded, \$203,792.

“Intelligent Vehicle Navigation System,” Texas Advanced Technology Program, Walter C. Daugherty and Jeffrey W. Fitzgerald, competitive and peer-reviewed, July 1995, not funded, \$195,058.

“Innovative Programs to Increase the Enrollment in Computer Science,” Texas Technology Workforce Development Grant Program, Valerie Taylor and Frank Shipman (co-PI’s), Lawrence Petersen, Walter C. Daugherty, and Joseph Hurley (Key Personnel), competitive and peer-reviewed, March 2005, pending, \$69,760.

6. New Design Methods, Techniques, or Concepts Developed

Null Modem

I independently invented the null modem in 1969 and constructed one for Harvard University (which is still operational!).

Computer Keyboard National Standard

As a member of the Harvard-MIT Terminal Committee, I participated in the development of the national standard for computer keyboards (*e.g.*, putting braces above brackets for the benefit of programming languages). Nearly every computer terminal and keyboard since then (*e.g.*, VT100, PC) uses this layout.

Integrated User Training

I invented the method of training users about additional features of an application program by integrating the information with the operation of the program (see Manwell, Daugherty, *et al.* under Publications, above). This is now widely adopted, *e.g.*, by Microsoft for its Windows operating systems in the “Getting Started” panel.

Object-Oriented Database

I independently invented and implemented an object-oriented database to support arbitrary combinations of data types.

Self-Organizing Fuzzy Controller

In collaboration with Balaji Rathakrishnan (a Graduate Research Assistant I funded) and John Yen, I developed a new systematic methodology for constructing and tuning fuzzy logic controllers. The research project was funded by Texaco (see the preceding section for details) for use in its refineries.

TEACHING

1. New Courses Developed

CPSC 111/211/311 Java and C-based sequence - Member of curriculum subcommittee, taught 111 and 211

CPSC 210 (Honors) - Data Structures

CPSC 320 (Honors) - Artificial Intelligence

CPSC 489 - Object-Oriented Programming, Systems, and Languages

CPSC 635 - Natural Language Processing (taught by Dr. P. Mayer)

CPSC 689 - Symbolic and Algebraic Computation (not taught)

CSCE 489/PHIL 382 (with Glen Miller [PHIL]) - Ethics and Cybertechnology

ENGR/PHIL 482 (Honors) - Ethics and Engineering

PHIL 282 (with Glen Miller [PHIL]) - Ethics in a Digital Age

PHYS/ELEN 674 (with David Church [PHYS]) - Special Topics in Quantum Computing (the first course at Texas A&M in quantum computing, and, to the best of my knowledge, the first course in quantum computing anywhere in Texas), taught Spring, 2005, for the fifth time.

A Distance Learning section of CPSC 601 - Programming in C and Java, taught Spring, 2003.

Two sections of CPSC 111 - Computer Science Concepts and Programming taught with student peer teachers as assistants, Fall, 2002.

Honors section of CPSC 111 - Computer Science Concepts and Programming taught with student peer teachers as assistants, Fall, 2004.

Developed (with Lawrence Petersen) an intensive summer training program in Java and Software Engineering for high-school computer science teachers, taught Summer, 2003.

Developing an intensive summer training program in Data Structures for high-school computer science teachers, taught Summer, 2004; I was also completely responsible for recruiting teachers, getting them admitted, arranging for housing, and so on.

2. Courses Taught

A. Graduate

CPSC 601 Programming in C and Java

CPSC 602 Object-Oriented Programming, Development, and Software Engineering

CPSC 614 Computer

Architecture CPSC 625 Artificial

Intelligence CPSC 632 Expert
Systems

CPSC 681 Graduate Seminar

CPSC 685 Problems

CPSC 691 Research

PHYS/ELEN 674 Quantum Computing (co-teacher)

B. Undergraduate

CPSC 111 Computer Science Concepts and Programming

CPSC 111H Computer Science Concepts and Programming (Honors)

CPSC 120 Programming II

CPSC 120H Programming II (Honors)

CPSC 203 Introduction to Computing

CPSC 206 Structured Programming in C

CPSC 210 Data Structures

CPSC 210H Data Structures (Honors)

CPSC 211 Data Structures and Implementations

CPSC 211H Data Structures and Implementations (Honors)

CPSC 285 Special Topics - Data Structures for Teachers

CPSC 289 Special Topics - Java and Software Engineering for Teachers

CPSC 311 Analysis of Algorithms

CPSC 320/420 Artificial Intelligence

CPSC 320H/420H Artificial Intelligence (Honors)

CPSC 321 Computer Architecture

CPSC 464 Integrated Systems Design Automation

CPSC 485 Problems

CPSC/ELEN 485H Problems (Honors theses)

CPSC 489 Object-Oriented Programming, Systems, and Languages

CSCE 113 Intermediate Programming and Design

CSCE 121 Introduction to Program Design and Concepts

CSCE 121H Introduction to Program Design and Concepts (Honors)

CSCE 315 Programming Studio

CSCE 410 Operating Systems

CSCE 489 Cyberethics (co-teacher)

ENGR 112 Foundations of Engineering II

ENGR 112H Foundations of Engineering II (Honors)

ENGR/PHIL 482H Ethics and Engineering (Honors)

PROFESSIONAL OUTREACH

1. Director, Knowledge Systems Research Center
2. Invited Significant Seminars or Lectures

Daugherty, W. C., "Computers and Privacy," Phi Theta Kappa Honor Society State Convention, Blinn College, Brenham, Texas, 1985.

Daugherty, W. C., and DeSoi, J. F., "Objected-Oriented Programming," Second Annual Texaco Artificial Intelligence Symposium, Houston, Texas, 1989.

Daugherty, W. C., "A Self-Tuning Fuzzy Controller," ARRI Conference on Fuzzy Logic, Arlington, Texas, March 1992.

Daugherty, W. C., Yen, J., and Langari, R., "Tutorial on Fuzzy Logic," Second International Workshop on Industrial Fuzzy Control & Intelligent Systems, College Station, Texas, December 1992.

Daugherty, W.C., "A Partially Self-Training System for the Protein Folding Problem," World Congress on Neural Networks, Portland, Oregon, July 1993.

Daugherty, W.C., "Neuro-fuzzy Systems," Third International Workshop on Industrial Fuzzy Control & Intelligent Systems, Houston, Texas, December 1993.

Daugherty, W.C. and Harris, C.E., "Ethics and Engineering," NSF Research Experience for Undergraduates, College Station, Texas, Summer 1994.

Daugherty, W.C. and Harris, C.E., "Ethics and Engineering," NSF Research Experience for Undergraduates, Austin, Texas, Summer 1994.

Daugherty, W.C. and Harris, C.E., "Ethics and Engineering," NSF Research Experience for Undergraduates, College Station, Texas, Summer 1995.

Daugherty, W.C. and Harris, C.E., "Ethics and Engineering," NSF Research Experience for Undergraduates, Austin, Texas, Summer 1995.

Daugherty, W.C., "Public-Key Cryptography Meets Quantum Computing: Why Secret Agencies are Quaking in their Boots." Quantum Computing Seminar, Texas A&M University, April 9, 2001.

Daugherty, W.C., "Quantum Computing 101: How to Crack RSA." DefCon X, Las Vegas, NV, August 4, 2002.

Daugherty, W.C., "Computer Ethics." ENGR 482 Ethics and Engineering, Texas A&M University, April 14-16, 2003.

Daugherty, W.C., "Incorporating Computer Ethics into an Engineering Ethics Course." University of Texas Ethics Conference, Austin, Texas, April 16, 2004.

Daugherty, W.C., "Computer Ethics." ENGR 482 Ethics and Engineering, Texas A&M University, November 8-10, 2004.

Daugherty, W.C., "[My] 53 Years of Computing History," CSCE 681 Open Graduate Seminar, Texas A&M University, November 18, 2015.

3. Consulting

St. Joseph's Hospital, Bryan, Fall 1990, at no charge.

Other clients include IBM Federal Systems Division, *New York Times*, *Washington Post*, *Los Angeles Times*, Cheyenne and Arapaho Tribes of Oklahoma, Southwestern Bell Telephone, Fulbright & Jaworski (Houston), Texas Department of Agriculture, Phonogram B.V. (Amsterdam), and U. S. Department of the Treasury.

HONORS AND AWARDS

Oklahoma Junior Academy of Science, elected to membership, 1961,
Oklahoma State University

National Science Foundation, Institute for High Ability Secondary
School Students, 1962, University of Oklahoma

Westinghouse, Science Talent Search national finalist,
1963 National Merit Scholarship test, highest score in
Oklahoma, 1963

Frontiers of Science, scholarship, 1963, Oklahoma City,
Oklahoma

Engineering Club of Oklahoma City, award, 1963, Oklahoma
City, Oklahoma

Oklahoma Christian College, full scholarship (top entering
freshman), 1963, Oklahoma City, Oklahoma

National Science Foundation, Undergraduate Research Participation
Program, 1965, University of Oklahoma, Norman, Oklahoma

Alpha Delta Tau, National Honor Society, 1966

Who's Who in American Colleges and Universities, 1966
 Graduate Record Exam in Mathematics, scored 800, 1966
 Harvard University, Prize Fellowship, 1966
 National Science Foundation, Academic Year Institute, 1967
 Phi Delta Kappa, National Honor Society, 1967
 Harvard University, Class Marshal for the Graduate School of Education, 1967
 Harvard University, Bowdoin Prize, bronze medal and cash award for outstanding writing, 1973
 Association for Computing Machinery, selected as a reviewer for *Computing Reviews*, 1975
 Association for Computing Machinery, Outstanding Regional Intercollegiate Programming Contest Director Award, 1993, Indianapolis, Indiana
 World Congress on Neural Networks, Neural Systems Session Co-chair, 1993, Portland, Oregon
 Graduate Student Council, 1997 Outstanding Graduate Faculty Award citation: "For your time and dedication to graduate students at Texas A&M."
 Named by the TAMU System to The Academy for Educator Development, a major component of The Texas A&M University System's Regents' Initiative for Excellence in Education, 2003 (one of only two faculty members selected from the entire College of Engineering).
 Winner, \$500 cash prize, Texas A&M University Academic Integrity Week Essay Competition (Faculty Category), 2004.
 Texas A&M University, Department of Computer Science & Engineering, 2009 Undergraduate Faculty Award citation: "In grateful appreciation of dedicated service, exemplary attitude, and significant contribution."
 Qualified for American MENSA, 2015.
 Oklahoma Christian University, Department of Mathematics and Computer Science, 2015
 Distinguished Alumnus Award citation: "For outstanding vision, dedication, and commitment to excellence."

EXHIBIT 10

EXHIBIT 10

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11 Facsimile: (702) 382-0540

12 *Attorneys for Defendant Joseph Lombardo*

13 **FIRST JUDICIAL DISTRICT COURT**

14 **CARSON CITY, NEVADA**

15 JOEY GILBERT, an individual,

16 Plaintiff,

17 vs.

18 JOSEPH LOMBARDO, Republican candidate
19 for Governor of Nevada,

20 Defendant.

Case No.: 22 OC 000851B
Dept. No.: I

**ORDER GRANTING DEFENDANT
JOSEPH LOMBARDO'S MOTION FOR
SUMMARY JUDGMENT**

21 The matter before the Court is the Motion for Summary Judgment filed by Defendant Joseph
22 Lombardo on August 1, 2022. The Court, having reviewed the papers, pleadings and supporting
23 exhibits including deposition testimony on file in this matter and considered the arguments of
24 counsel at the time of hearing on August 10, 2022 as required by NRS 293.415, with good cause
25 appearing and no just reason for delay, hereby rules as follows:

26 **I. FINDINGS OF FACT**

27 1. Mr. Gilbert's Statement of Contest relies on a two-step process set forth in the
28 Solomon Report to demonstrate he received more votes in the 2022 Republican Gubernatorial
Primary Election than Mr. Lombardo. *See* Statement of Contest ¶ 24.

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AUBREY ROBERTS
CLERK

BY _____

1 2. According to the Statement of Contest, the first step is to demonstrate that the result
2 of the 2022 Republican Primary Election is mathematically or geometrically “impossible.” *See*
3 Statement of Contest ¶ 32.

4 3. After establishing that the reported results of the 2022 Republican Gubernatorial
5 Primary Election are mathematically or geometrically “impossible,” the second step is to “restore”
6 the votes and determine the actual election results without the interference of a predetermined
7 outcome or algorithm. *See* Statement of Contest ¶¶ 36-48.

8 4. While Mr. Gilbert’s expert witnesses purport to have performed the first step and
9 reached the same conclusion as Mr. Edward Solomon—*i.e.*, that the results of the 2022 Republican
10 Gubernatorial Primary Election are mathematically or geometrically “impossible,” none of them
11 offer any opinions—admissible or otherwise—on the second step of “restoring” the actual vote
12 counts.

13 5. The concept of “restoration” is addressed at length in Mr. Solomon’s report attached
14 as Exhibit A to the Statement of Contest (the “Solomon Report”). All parties agree, however, that
15 Mr. Solomon does not qualify as an expert, and Mr. Gilbert has confirmed he will not be calling Mr.
16 Solomon as a witness in this proceeding.

17 6. One of Mr. Gilbert’s proposed experts, Dr. Oliver A. Hemmers, ostensibly addresses
18 the concept of “restoration” in his report attached as Exhibit B to the Statement of Contest. Dr.
19 Hemmers’ alleged opinions on the subject are also quoted at length in the Statement of Contest. *See*
20 Statement of Contest ¶¶ 51-52. But in his deposition, Dr. Hemmers admitted that he did not perform
21 any work on “restoration” and merely copied portions of the Solomon Report. *See* Motion for
22 Summary Judgment (“Mot.”), Ex. D. In other words, Dr. Hemmers did not offer any independent
23 opinions on the concept of “restoration” and instead restated lengthy sections of the Solomon Report,
24 which is inadmissible for reasons set forth below.
25
26
27
28

1 suggested that NRS 293.410(2)(a) and (c) were also potentially at issue in this election contest.
2 Under those provisions, Mr. Gilbert must demonstrate that either “the election board or any member
3 thereof was guilty of malfeasance,” NRS 293.419(a), or “(1) [i]llegal or improper votes were cast
4 and counted; (2) [l]egal and proper votes were not counted; or (3) [a] combination of the
5 circumstances described in subparagraphs (1) and (2) occurred, in an amount that is equal to or
6 greater than the margin between the contestant and the defendant, or otherwise in an amount
7 sufficient to raise reasonable doubt as to the outcome of the election.” NRS 293.410(2)(c).
8

9 3. To prevail, Mr. Gilbert must prove the grounds for his election contest by clear and
10 convincing evidence. *Law v. Whitmer*, 477 P.3d 1124, *1, 17 (Nev. 2020) (affirming application of
11 the clear and convincing evidence standard in a contest of the 2020 Presidential Election) (listing
12 supporting cases). “Clear and convincing evidence must be ‘satisfactory’ proof that is so strong and
13 cogent as to satisfy the mind and conscience of a common man, and to convince him that he would
14 venture to act upon that conviction in matters of the highest concern and importance to his own
15 interest.” *Id.* at *17 (quoting *In re Discipline of Drakulich*, 111 Nev. 1556, 1566, 908 P.2d 709, 715
16 (1995)). The Court views the evidence through the lens of the applicable burden of proof at the
17 summary judgment stage. *See Ferguson v. LVMPD*, 131 Nev. 939, 944, 364 P.3d 592, 595 (2015).
18

19 4. Because Mr. Solomon does not qualify as an expert and Mr. Gilbert has declined to
20 call him as a witness in this proceeding, the Solomon Report is inadmissible hearsay and Mr. Gilbert
21 may not rely on its contents to prove his claims in this election contest. *See Ramirez v. State*, 114
22 Nev. 550, 560-61, 958 P.2d 724, 730-31 (1998) (holding medical examiner’s written report was
23 inadmissible hearsay unless he was present to testify and be cross-examined).
24

25 5. Similarly, the Solomon Report also does not constitute the type of evidence
26 “reasonably relied on by experts” under NRS 50.285(2). Indeed, “[r]eports specifically prepared for
27 purposes of litigation are not, by definition, of a type reasonably relied upon by experts in the
28

1 particular field.” *United States v. Tran Trong Cuong*, 18 F.3d 1132, 1143-44 (1994); *see also In re*
2 *Imperial Credit Indus., Inc. Sec. Litig.*, 252 F.Supp.2d 1005, 1012 (C.D. Cal. 2003) (“Federal Rules
3 of Evidence 702 and 703 permit an expert to rely upon ‘facts and data.’ The rules do not permit an
4 expert to rely upon excerpts from opinions developed by another expert for purposes of litigation.”);
5 *Avondale Mills, Inc. v. Norfolk S. Corp.*, 2008 WL 6953956, at *3 (D. S.C. Feb. 21, 2008) (“It has
6 been held that reports prepared for purposes of litigation [] are not ‘of a type reasonably relied upon
7 by experts in a particular field.’”).

9 6. Mr. Gilbert cites to Dr. Hemmers’ report as the basis for many of his allegations
10 concerning “restoration.” Dr. Hemmers, however, made it clear in his deposition that he effectively
11 copied Mr. Solomon’s opinions on the subject. To that end, Dr. Hemmers does not offer any
12 independent opinions on “restoration” and his restatement of the Solomon Report is improper from
13 an evidentiary standpoint. *Ramirez*, 114 Nev. at 558, 958 P.2d at 729 (summarizing *United States*
14 *v. Tran Trong Cuong*, 18 F.3d 1132 (1994) and restating principle that a testifying expert witness
15 may not vouch for and parrot the opinions of a non-testifying expert witness); *Villagomes v.*
16 *Laboratory Corp. of Am.*, 2010 WL 4628085, at *4 (D. Nev. Nov. 8, 2010) (“an expert may rely on
17 information provided by non-testifying experts, so long as he does not merely serve as a spokesman
18 for the absent expert, vouching for the truth of his statements”) (citing several supporting cases).

20 7. Dr. Allen and Dr. Daugherty both acknowledged that they did not attempt to
21 “restore” the true vote counts and have no opinions on the subject.

22 8. Accordingly, even if the Court were to accept Mr. Solomon’s theories that the result
23 of the 2022 Republican Primary Election is mathematically or geometrically “impossible,” Mr.
24 Gilbert has not presented any competent evidence that the allegedly flawed math means he received
25 more votes than Mr. Lombardo as none of his proposed testifying expert witnesses have offered any
26 opinions on the concept of “restoration” or the results it would purportedly yield in the 2022
27
28

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1 Republican Gubernatorial Primary Election. For the same reasons, Mr. Gilbert cannot demonstrate
2 there is evidence sufficient to raise reasonable doubt as to the outcome of the election. Nor is there
3 any competent evidence that the election board or any member thereof was guilty of malfeasance.
4 The clear absence of admissible evidence on these subjects is insufficient to meet the heightened
5 clear and convincing standard that applies to Mr. Gilbert's theories under NRS 293.410(2)(a), (c),
6 (d) or (f). Accordingly, the Court hereby grants summary judgment in favor of Mr. Lombardo.
7

8 **III. ORDER**

9 IT IS HEREBY ORDERED AND ADJUDGED that Mr. Lombardo's Motion for Summary
10 Judgment is GRANTED and Mr. Gilbert's Statement of Contest is DISMISSED WITH
11 PREJUDICE.

12 IT IS FURTHER ORDERED that the August 12, 2022 hearing date is VACATED.

13 IT IS SO ORDERED on this 11 day of August, 2022.

14
15 
16 DISTRICT COURT JUDGE

17 Respectfully submitted by:

18 CAMPBELL & WILLIAMS


19 By 
20 J. COLBY WILLIAMS, ESQ. (5549)
21 PHILIP R. ERWIN, ESQ. (11563)
22 SAMUEL R. MIRKOVICH, ESQ. (11662)
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25 Attorneys for Defendant
26 Joseph Lombardo
27
28

EXHIBIT 11

EXHIBIT 11

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12 *Attorneys for Defendant*
13 *Joseph Lombardo*

FIRST JUDICIAL DISTRICT COURT
CARSON CITY, NEVADA

14 JOEY GILBERT, an individual,
15
16 Plaintiff,
17
18 vs.
19
20 STEVE SISOLAK, in his official capacity as
21 Governor of Nevada; BARBARA CEGAVSKE,
22 in her official capacity as Secretary of State; and
23 JOSEPH GLORIA in his official capacity as
24 Clark County Registrar of Voters, JAMES B.
25 GIBSON, in his official capacity as Chairman of
26 the CLARK COUNTY BOARD OF
27 COMMISSIONERS, and DEANNA SPIKULA
28 in her official capacity as Washoe County
Registrar of Voters and VAUGHN HARTUNG
in his official capacity as Chair of the WASHOE
BOARD OF COUNTY COMMISSIONERS,
and JOSEPH LOMBARDO, putative
Republican candidate for Governor of Nevada;
and DOES 1 through 10 and ROES 1-10,

Defendants.

Case No.: 22 OC 000851B
Dept. No.: I

**ORDER GRANTING DEFENDANT
JOSEPH LOMBARDO'S MOTION FOR
SANCTIONS**

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AUBREY ROBERTS
CLERK
BY _____
DEPUTY

1 The matter before the Court is the Motion for Sanctions filed by Defendant Joseph Lombardo
2 (“Mr. Lombardo”) on August 19, 2022. The Court, having reviewed the papers, pleadings and
3 supporting exhibits and considered the arguments of counsel at the time of hearing, with good cause
4 appearing and no just reason for delay, hereby rules as follows:

5 I. FINDINGS OF FACT

6
7 1. At some point prior to filing his Statement on Contest (“Contest”), Mr. Gilbert and/or
8 his counsel contacted Edward Solomon (“Mr. Solomon”) and retained him to prepare a “Precinct
9 Analysis” of the Clark County results in the 2022 Republican Gubernatorial Primary (“2022
10 Primary”), *i.e.*, the Solomon Report. Mr. Gilbert’s counsel then retained Dr. Oliver Hemmers, Dr.
11 Walter Daugherity and Dr. G. Donald Allen as testifying expert witnesses and provided them with
12 the Solomon Report. All three expert witnesses were effectively retained to vouch for Mr. Solomon’s
13 theories and introduce his findings in the Solomon Report into evidence as all parties agreed Mr.
14 Solomon is unqualified to be an expert in this action. To that end, Mr. Gilbert’s expert witnesses
15 interacted extensively with Mr. Solomon when preparing their reports and responding to issues raised
16 by Mr. Lombardo’s counsel and expert witnesses in this election contest.

17
18 2. Mr. Gilbert filed his Contest on July 15, 2022. Therein, Mr. Gilbert relied on a two-
19 step process set forth in the Solomon Report to demonstrate he received more votes than Mr.
20 Lombardo in the 2022 Primary. *See* Contest ¶ 24. The first step was to demonstrate that the result
21 of the 2022 Primary is mathematically or geometrically “impossible” based on the assumption that
22 “[i]n a fair election, we expect a strong linear correlation between Gilbert’s Election Day, Mail-in
23 and Early Vote percentages.” *Id.* ¶¶ 28, 32. After purporting to establish that the reported results of
24 the 2022 Primary are mathematically or geometrically “impossible,” the second step in Mr.
25 Solomon’s theory was to “restore” the votes and determine the actual election results without the
26 interference of a predetermined outcome or algorithm. *See* Contest ¶ 36
27
28

1 3. As detailed in the Court’s order granting summary judgment, Mr. Gilbert did not
2 present any competent evidence that the allegedly flawed math means he received more votes than
3 Mr. Lombardo as none of his proposed testifying expert witnesses offered any opinions on the
4 concept of “restoration” or the results it would purportedly yield in the 2022 Republican
5 Gubernatorial Primary Election. See Order dated August 11, 2022 (on file). Rather, to the extent
6 Mr. Gilbert’s expert witnesses offered opinions regarding “restoration,” they were entirely based on
7 the Solomon Report and, thus, inadmissible under Nevada law.
8

9 **II. CONCLUSIONS OF LAW**

10 1. NRS 18.010(2)(b) provides that a “court may make an allowance of attorney’s fees
11 to a prevailing party [] when the court finds that the claim, counterclaim, cross-claim or third-party
12 complaint or defense of the opposing part was brought or maintained without reasonable ground or
13 to harass the prevailing party.” NRS 7.085(1) further provides that “[i]f a court finds that an attorney
14 has (a) [f]iled, maintained or defended a civil action or proceeding any court in this State and such
15 action or defense is not well-grounded in fact or is not warranted by existing law or by an argument
16 for changing the existing law that is made in good faith; or (b) [u]nreasonably and vexatiously
17 extended a civil action or proceeding before any court in this State, the court shall require the attorney
18 to pay the additional costs, expenses and attorney’s fees reasonable incurred because of such
19 conduct.” Notably, in enacting NRS 18.010 and NRS 7.085, the Nevada Legislature expressly
20 instructed that the Court shall liberally construe the statutes in favor of awarding attorney’s fees to
21 punish and deter frivolous or vexatious litigation.
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24 2. The Court is also entitled to exercise its inherent power to sanction litigants for bad
25 faith conduct by awarding attorney’s fees. See *Emerson v. Eighth Judicial Dist. Court*, 127 Nev.
26 672, 680-81, 263 P.3d 224, 229-30 (2011) (affirming that district courts have broad discretion to
27 punish litigation misconduct); *Chambers v. NASCO, Inc.*, 501 U.S. 32 (1991).
28

1 3. Courts have applied similar statutes to punish parties and their counsel for filing and
2 maintaining frivolous election contests and other election-related litigation without any reasonable
3 grounds to do so. *See, e.g., King v. Whitmer*, 556 F.Supp.3d 680 (E.D. Mich. 2021) (imposing
4 sanctions under Rule 11, § 1927 and the court’s inherent authority “to deter the filing of future
5 frivolous lawsuits designed primarily to spread the narrative that our election processes are rigged
6 and our democratic institutions cannot be trusted”); *Gaddis v. McCullough*, 827 N.E.2d 66 (Ind. Ct.
7 App. 2005) (imposing sanctions under Indiana’s frivolous litigation statute where there was no
8 reasonable or well-grounded basis for unsuccessful candidates’ election contest); *Reid v. Dalton*, 100
9 P.3d 349 (Wash. Ct. App. 2004) (imposing sanctions under Washington’s frivolous litigation statute
10 where unsuccessful candidate maintained his meritless election contest after being threatened with
11 sanctions by the prevailing candidate unless the contest was withdrawn); *In re: Contest of November*
12 *5, 2019 Gen. Election for Chancery Clerk of Quitman*, 329 So.3d 434 (Miss. 2021) (reversing circuit
13 court’s denial of attorney’s fees to prevailing party under Mississippi’s frivolous litigation statute
14 where losing candidate brought election contest without substantial justification); *Davis v. Dunn*,
15 690 S.E.2d 389 (Ga. 2010) (imposing sanctions under Georgia’s frivolous litigation statute where
16 losing candidate failed to present any factual basis or admissible evidence to cast doubt on the
17 election results).

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20 4. The Court finds that Mr. Gilbert’s Contest is a frivolous action that warrants sanctions
21 under NRS 18.010(2)(b) and NRS 7.085(1). Mr. Gilbert did not—and could not—present any
22 admissible evidence to support the case-dependent thesis that the restored election results show he
23 received the most votes in the 2022 Primary. The fundamental lack of evidence on this pivotal issue
24 proved fatal to the Contest as the Court granted summary judgment in Mr. Lombardo’s favor at the
25 conclusion of discovery. *See* Order dated August 11, 2022 (on file). Because “[a]n action is not
26 well-grounded when there is no evidence to support it,” *Watson Rounds, P.C. v. Eighth Judicial*
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28

1 Dist. Court, 133 Nev. 1090, 391 P.3d 759, 2017 WL 1080061, at *1 (2017), Mr. Gilbert's failure to
2 adduce any competent evidence regarding the key element of "restoration" is grounds for the
3 imposition of sanctions under NRS 18.010(2)(b) and NRS 7.085(1) as he could never demonstrate
4 that he prevailed in the 2022 Primary.

5 5. The Court further finds that Mr. Gilbert's contention that the results of 2022 Primary
6 were mathematically or geometrically "impossible" does not rise to the level of a well-grounded
7 claim under Nevada law. Indeed, based on the opinions of Mr. Lombardo's qualified expert
8 witnesses, the Court finds Mr. Gilbert's claim regarding the "math" is highly dubious. But, even if
9 his claim regarding mathematic or geometric "impossibility" was true, Mr. Gilbert still did not have
10 any competent evidence to demonstrate that he won the 2022 Primary as would be required to prevail
11 under NRS 293.410(2).

12
13 **III. ORDER**

14
15 IT IS HEREBY ORDERED AND ADJUDGED that Mr. Lombardo's Motion for
16 SANCTIONS is GRANTED.


17 IT IS FURTHER ORDERED that Mr. Lombardo shall submit his memorandum of attorney's
18 fees on or before October 11, 2022

19 IT IS SO ORDERED on this 21 day of September, 2022.

20
21 
DISTRICT COURT JUDGE

22 Respectfully submitted by:

23 CAMPBELL & WILLIAMS

24 By 
25 J. COLBY WILLIAMS, ESQ. (5549)
26 PHILIP R. ERWIN, ESQ. (11563)
27 SAMUEL R. MIRKOVICH, ESQ. (11662)

28 *Attorneys for Defendant
Joseph Lombardo*