Michael A. Jones

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Employment History

2008-present	Associate Editor, Mathematical Reviews, American Mathematical Society, Ann Arbor, MI
2019-2024	Managing Editor, Mathematical Reviews, American Mathematical Society, Ann Arbor, MI
2015-2019	Editor *Mathematics Magazine*; 2014, Editor-elect
2009-present	Instructor, Michigan Math and Science Scholars program, Univ. of Michigan, Ann Arbor, MI Math. of Decisions, Elections, and Games; 2-week summer course for high school students
2008-present	Visiting Research Investigator, University of Michigan, Ann Arbor, MI
2012-2017	Research Affiliate, Albion College, Albion, MI

2003-2008	Associate Professor (tenured 2003), Mathematical Sciences, Montclair State University
2005-2008	Graduate Program Coordinator, Mathematical Sciences, Montclair State University
1998-2003	Assistant Professor, Mathematical Sciences, Montclair State University, Montclair, NJ
2005-2007	Adjunct Professor (game theory), Department of Politics, New York University
2001-2004	Visiting Scholar, Department of Politics, New York University, New York, NY
1997-1998	Visiting Assistant Professor, Mathematical Sciences, Loyola University, Chicago, IL
1994-1997	Assistant Professor, Mathematical Sciences, US Military Academy; West Point, NY

Selected Professional Service Positions

2022	Editor: Contemporary Math: Math. Analyses of Decisions, Voting, and Games
2013	Editor: Contemporary Math: Math. of Decisions, Elections, and Games
2012-2017	Member, Program Area Study Group concentrating on UG programs in applied mathematics for MAA Committee on the Undergraduate Program in Mathematics
2005-2013	Member, Editorial Board, *The College Mathematics Journal*
2006-2015	Member, Editorial Advisory Board, *PRIMUS*
2003-2010	Member, Editorial Advisory Board, MAA Spectrum Book Series

Education

PhD	Mathematics, Northwestern University, Evanston, IL, June 1994 Dissertation: Indefinitely Repeated Games and Cooperation Committee: Donald G. Saari (Advisor), Ehud Kalai, and Sandy Zabell
MA	Mathematics. Northwestern University, Evanston, IL, June 1991 Traditional course work in mathematics, as well as the requisite doctoral courses from the Managerial Economics and Decision Sciences program at the Kellogg Business School; Mathematical Methods in the Social Sciences program (1991-1993); Roger Myerson (Advisor)

BS	Mathematics, Santa Clara University, Santa Clara, CA, June 1989, *magna cum laude* Jerry L. Alexanderson (Advisor). Honors Program, Pi Mu Epsilon, Sigma Xi, Phi Beta Kappa

Mathematical Reviews/Responsibilities as Associate Editor

Mathematical Reviews, a division of the American Mathematical Society, is responsible for creating the MathSciNet database that provides timely reviews and abstracts of articles and books that contribute to research in the mathematical sciences. I am part mathematician, part editor, and part librarian (see below). I am responsible for different mathematical areas and handle approximately 10,000 items per year. My primary areas of coverage are 91 Game theory, economics, social and behavioral sciences; 97 Mathematics education; 26 Real functions; and 39 Difference equations. I have also covered: 05 Combinatorics and graph theory; 06 Order, lattices, ordered algebraic structures; 08 General algebraic systems; 51 Geometry; 52 Convex and discrete geometry; 54 General topology; 55 Algebraic topology; 68 Computer science; 92 Biology and other natural sciences; and 94 Information theory, communication, and circuits.

Classifying	Classify items (articles and books) according to the MSC numbers.
Assigning	Decide which items are to be reviewed. Assign items to reviewers.
Editing	Edit returned reviews. Verify the veracity of mathematical statements in reviews.

Grants, Awards, and Fellowships

• 2018 Recipient of the Mathematical Association of America's George Pólya Award for articles of expository excellence published in *The College Mathematics Journal* 46, 1 (Jan. 2018) 1–9 for:

The Calculus Behind Generic Drug Equivalence with S.R. Huddy.

• 2012 Recipient of the Mathematical Association of America's George Pólya Award for articles of expository excellence published in *The College Mathematics Journal* 42, 1 (Jan. 2011) 2-8 for:

Chutes and Ladders for the Impatient. with undergraduate students L. Cheteyan and S. Hengevelde.

Montclair State University

• College of Science and Mathematics Faculty Teaching Award AY 2006-07.

• NSF CCLI A&I: A Sophomore-Level Transition Course. With A. Mukherjee (NSF DUE #0310753); July 2003-July 2005; $52,000.

• Summer Grant Proposal Development Award; The Fair Division of Divisible and Indivisible Goods; Summer 2007; $4000.

• Sokol Faculty/Student Research Award: 'Explicitly Determining the Relationship between Implicit Learning and the Complexity of Artificial Grammars. Summer 2003; $2000.

• Separately Budget Research Grant for Summer 2001: Reputation in Game Theory. $2,000.

• GRIPSAM Grant for Summer 2001: A priori Quota Selection in Simple Weighted-Voting Games. $2,000.

• Student Faculty Research Grant for Summer 1999: Determining the Properties of Numbers in a Cryptographic Method to Eliminate False Positives. $2000.

US Military Academy

• Superior Civilian Service Award, for "... outstanding instruction and leader development ... " May 1997.

• Army Research Office Grant for "A Dynamic Model of a Continuous Blotto Game," 1995-1996; $1,500.

• Faculty Development Research Fund Grant for "The Geometry of Allocations," 1994-1995; $1,500.

Northwestern University

• Summer Research Support under NSF grant IST 9103180, Summer 1993; $2,000.

• Mathematics Departmental Fellowship, 1990-1991; 1993-1994; University Fellowship, 1989-1990.

• Assistantship in the Mathematical Methods in the Social Sciences Program, 1991-1993.

Research Mentoring Accomplishments

• Masters Thesis Advisor; Kei Kaneko, August 2004, On the $\mathcal{P}/\mathcal{N}$ Structure of Nim.

• Co-director and co-founder of Research Opportunities for Commuter Students (ROCS), an in-house, academic-year REU for undergraduate students at Montclair. Students learn LaTeX, Maple, and presentation software. Students prepare technical reports, give talks and present posters.

• Mentored ROCS student Brittany C. Shelton who was among the winners of the January 2006 Undergraduate Poster Competition at the Joint Math Meetings of the AMS/MAA in San Antonio, TX for her poster "Nimber Sequences with No Preperiods for Three-Element Subtraction Sets."

• Published articles with 10 undergraduates, 7 masters students, 1 PhD student, and 6 high school students.

Publications

Books (1) **Journal Articles** (61) **Book Chapters/Collections** (14) **Proceedings** (6)
"Smalls" (13) **Peer-Reviewed Newsletters** (5) **Book Reviews** (4)

Under Review, Under Revision, or Draft Available

A Mechanism Design Approach to Allocating Travel Funds. M.A. Jones. arXiv:2110.04161

Sequential Apportionments from Stationary Divisor Methods. M.A. Jones, B. Ohlinger, and J.M. Wilson. Draft available.

Books

1. *Delegate Apportionment in the US Presidential Primaries: A Mathematical Analysis*, Michael A. Jones, David McCune, and Jennifer M. Wilson. Studies in Choice and Welfare, Springer, 2023. XVII, 215 pages; https://doi.org/10.1007/978-3-031-24954-9

Journal Articles (* = student coauthor)

62. The Super Bowl Squares Pool. S.R. Huddy and M.A. Jones. To appear in the *College Mathematics Journal*.
61. Redistributing Votes when Candidates Drop Out of an Election. S.R. Huddy, M.A. Jones, and J.M. Wilson. To appear in *The Mathematics Enthusiast*.

60. Proportional Consistency of Apportionment Dethods. M.A. Jones, D. McCune, and J.M. Wilson. To appear in Addressing Modern Challenges in the Mathematical, Statistical, and Computational Sciences proceedings for AMMCS-2023: The VIth Interdisciplinary International Conference on Applied Mathematics, Modeling and Computational Science (Waterloo, Canada). Springer. (A longer version with additional proofs appears as arXiv:2311.06969.)
59. The Australian Shuffle and Two Self-Working Card Tricks. A.A. Gaenko*, M.A. Jones, V. Natogi*, A. Swanson*, A.S. Venkat*, and K.M. Vu*. To appear in the *Mathematical Gazette*, July 2025.
58. The Will Rogers Phenomenon and Sequential Migration. M.A. Jones, A. Mocny*, and J.M. Wilson. *College Math. Journal*. 55(3), (2024) 235–244. DOI: 10.1080/07468342.2024.2305210
57. Self-Similar Structure of $\mathcal{P}$-Positions of the Game Euclid. M.A. Jones and B.C. Ohlinger. *The Fibonacci Quarterly*, 62, 1 (2024) 15–28.
56. The Colley Matrix is an Extension of the Borda Count. M.A. Jones and J. Wilson. *Mathematics Magazine*, 97(2), (Apr 2024) 140–150. DOI: 10.1080/0025570X.2024.2312781
55. Allocating Scarce Resources using a Weighted Lottery. M.A. Jones, A. Shor*, and J. Wilson. *College Math. Journal*, 53 (Sep. 2022) 298–305. DOI: 10.1080/07468342.2022.2099706
54. A Difference Equation Approach to Finite Differences of Polynomials. M.A. Jones. *College Math. Journal*, 51 (Nov. 2020) 375–377. DOI: 10.1080/07468342.2020.1760065
53. New Quota-based Apportionment Methods: The Allocation of Delegates in the Republican Presidential Primary. M.A. Jones, D. McCune, and J. Wilson. *Mathematical Social Sciences*, 108, Nov. 2020, 122-137. DOI: 10.1016/j.mathsocsci.2020.05.001
52. An Axiomatic Approach to Cost Sharing Child Support. M.A. Jones and J. Wilson. *Economic Letters*, 195 (2020) 109452, 5 pages. DOI: 10.1016/j.econlet.2020.109452
51. A Two-Dimensional Perspective on Simpson's Paradox and Its Likelihood. M.A. Jones and J. Wilson. *College Math. Journal*. 50 (Sep. 2019) 295–297. DOI: 10.1080/07468342.2019.1634425
50. Quotients of Hypotenuses of Pythagorean Triples $(a,\ b,\ b+1)$ and Finite Differences. S.R. Huddy and M.A. Jones. *The Mathematical Gazette*. 103 (Mar. 2019) 132–135. DOI: 10.1017/mag.2019.18
49. The Elimination Paradox: Apportionment in the Democratic Party. M.A. Jones, D. McCune, and J. Wilson. *Public Choice*, 178, 1–2 (Jan. 2019) 53–65. DOI: 10.1007/s11127-018-0608-3
48. All Parabolas through Three Non-collinear Points. S.R. Huddy and M.A. Jones. *Math. Gazette* 102 (July 2018) 203–209. DOI: 10.1017/mag.2018.51
47. Utility Theory and *Deal or No Deal*. M.A. Jones, B. Shelton, and J. Wilson. *Math. Scientist*, 43 (June 2018) 1–9.
46. The Calculus Behind Generic Drug Equivalence. S.R. Huddy and M.A. Jones. *College Math. Journal*. 46, 1 (Jan. 2018) 1-9. DOI: 10.1080/07468342.2017.1391502
45. *Deal or No Deal?* Expected Value, Utility Theory, and the Role of the Banker. M. Davis, M.A. Jones, B. Shelton, and J. Wilson. *Consortium* Pull-out section, 14 pages, Fall/Winter 2017.
44. Abelian and Non-Abelian Triangle Mysteries. L.H. Mitchell, M.A. Jones, and B.C. Shelton. *American Mathematical Monthly*. 123, 8 (Oct. 2016) 808-813. DOI: 10.4169/amer.math.monthly.123.8.808
43. The Geometry of Adding Up Votes. M.A. Jones and J. Wilson. *Math Horizons*. 24, 1 (Sep. 2016) 5-9. DOI: 10.4169/mathhorizons.24.1.5
42. Rankings over Time. M.A. Jones, A. Webb*, and J. Wilson. *College Mathematics Journal*. 47, 4 (Sep. 2016) 242-248. DOI: 10.4169/college.math.j.47.4.242
41. Fractals and Mysterious Triangles. M.A. Jones, L.H. Mitchell, and B.C. Shelton. *Math Horizons*. 23, 1 (Sep 2015) 22-25. DOI: 10.4169/mathhorizons.23.1.22
40. A Geometric Perspective on Counting Nonnegative Integer Solutions and Combinatorial Identities. M.J. Haines, S.R. Huddy, and M.A. Jones. *International Journal of Mathematical Education in Science and Technology*. 46, 4 (2015) 598-611. DOI: 10.1080/0020739X.2014.985273
39. Adjusting Child Support Payments in Michigan. M.A. Jones and J. Wilson. *College Math. Journal*. 46, 1 (Jan. 2015), 3–6. DOI: 10.4169/college.math.j.46.1.3
38. On God's Number(s) for *Rubik's Slide*. M.A. Jones, B. Shelton*, and M. Weaverdyck*. *College Math. Journal*. 45, 4 (Sep. 2014), 267-275. DOI: 10.4169/college.math.j.45.4.267
37. Two-step Coalition Values for Multichoice Games. M.A. Jones and J.M. Wilson. *Mathematical Methods in Operations Research* 77, 1 (Jan. 2013), 65-99. DOI: 10.1007/s00186-012-0415-4
36. N-Person Cake-Cutting: There May Be No Perfect Division. S.J. Brams, M.A. Jones and C. Klamler. *American Mathematical Monthly*. 120, 1 (Jan. 2013) 35-47. DOI: 10.4169/amer.math.monthly.120.01.035
35. Divide-and-Conquer: A Proportional, Minimal-Envy Cake-Cutting Algorithm. S.J. Brams, M.A. Jones and C. Klamler. *SIAM Review* 53, 2, (May 2011) 291-307. DOI: 10.1137/080729475
34. *Chutes and Ladders* for the Impatient. L. Cheteyan*, S. Hengevelde*, and M.A. Jones. *College Mathematics Journal* 42, 1, (Jan. 2011) 2-8. DOI: 10.4169/college.math.j.42.1.002
33. Cutoffs and Thresholds in the Democratic Primary. M.A. Jones and J.M. Wilson. *The UMAP Journal* 31, 3 (Fall 2010) 197-214.

32. Apportionment in the Democratic Primary Process. K. Geist*, M.A. Jones, and J. Wilson. *Mathematics Teacher* 104, 3 (Oct. 2010) 214-220. DOI: 10.5951/MT.104.3.0214. Web supplement available at http://www.nctm.org/uploadedFiles/Journals_and_Books/MT/Extras/mt2010-10-214c.pdf.
31. Interview with Steven J. Brams. M.A. Jones. *College Mathematics Journal*. 41, 4 (Sep. 2010) 262-267. doi:10.4169/074683410X510254
30. Multilinear Extensions and Values for Multichoice Games. M.A. Jones and J.M. Wilson. *Mathematical Methods of Operations Research* 73, 1 (Aug. 2010) 72: 145-169. doi:10.1007/s00186-010-0313-6
29. Evaluation of Thresholds for Power Mean-based and Other Divisor Methods of Apportionment. M.A. Jones and J.M. Wilson. *Mathematical Social Sciences*. 59, 3 (May 2010) 343-348. doi:10.1016/j.mathsocsci.2010.02.002
28. Two Observations on Unsolved Problem #1046 on Prime Circles of $\{1, \ldots, 2m\}$. M.A. Jones and L. Cheteyan*. *Journal of Recreational Mathematics.* 35, 1 (2006) 15-20. [Submitted Sep. 2008; Published Oct. 2009]
27. The Geometry Behind Paradoxes of Voting Power. M.A. Jones. *Mathematics Magazine.* 82, 2 (April 2009) 103-116. DOI: 10.1080/0025570X.2009.11953603
26. Applying Secant Lines and Tangent Lines for the Optimal Placement of Range Lights. M.A. Jones, R. Abi-Hanna* and K. Krott*. *Mathematics Teacher.* 101 (2008) 682-689. DOI: 10.5951/MT.101.9.0682
25. Proportional Pie-Cutting. S.J. Brams, M.A. Jones and C. Klamler. *International Journal of Game Theory.* 36 (2008) 353-367. DOI: 10.1007/s00182-007-0108-z
24. Redundancy in Nimber Sequences for Three-Element Subtraction Sets. M.A. Jones, B.C. Shelton*, and S.R. Huddy*. *Pi Mu Epsilon Journal.* 12 (2007) 393-403.
23. Better Ways to Cut a Cake. S.J. Brams, M.A. Jones and C. Klamler. *Notices of the American Mathematical Society*, 53 (2006), 1314-1321. Errata: "Letter to the Editor: Correction" (Jan. 2007), p.7; "Editor's Note: More on Cake Cutting" (Oct. 2008), p.1072. [article also appeared in the Proceedings of the DIMACS-LAMSADE Workshop on Voting Theory and Preference Modeling, Annales du LAMSADE, No. 6, October 2006, 61-76 (ISSN 1762-455X).]
22. Graph Theory and Finite Dynamical Systems from Solitaires and Games. M.A. Jones. *Graph Theory Notes of New York*, Vol. LI, (2006) 50-58.
21. Shift-Induced Dynamical Systems on Compositions and Partitions. B. Hopkins and M.A. Jones. *Electronic Journal of Combinatorics*. 13, 1 (2006) #R80 (19 pages). DOI: 10.37236/1106
20. Emphasizing the NCTM Content Standards in Undergraduate Courses for Prospective Teachers. E. Fernandez and M.A. Jones. *Mathematics and Computer Education.* 40, 3 (Fall 2006) 237-247.
19. The Sprinkler Problem: A Mathematician Waters the Lawn. M.A. Jones and J.L. Stonick*. *The Mathematical Gazette*, 90, 517 (March 2006) 50-56. DOI: 10.1017/S0025557200179021
18. Forming Stable Coalitions: The Process Matters. S.J. Brams, M.A. Jones, and D.M. Kilgour. *Public Choice* 125, 1-2 (2005) 67-94. DOI: 10.1007/s11127-005-3410-y
17. Nim-Induced Dynamical Systems over $\mathbb{Z}_2$. M.A. Jones and D.M.Thomas. *Discrete and Continuous Dynamical Systems* (Aug. 2005) 453-462.
16. The Pythagorean Theorem of Baseball and Alternative Models. M.A. Jones and L. Tappin. *The UMAP Journal* 25, 2 (2005) 25-36.
15. Controlling Wound Healing through Debridement. M.A. Jones, B. Song, and D.M. Thomas. *Mathematical and Computer Modelling* 40, 9-10 (2004) 1057-1064. DOI: 10.1016/j.mcm.2003.09.041
14. Win, Lose, or Draw: A Markov Chain Analysis of the National Football League's Overtime Rules. M.A. Jones. *College Mathematics Journal* 35, 5 (Nov. 2004) 330-336. DOI: 10.1080/07468342.2004.11922094
13. Fairness, How to Achieve It, and How to Optimize in a Fair Division Procedure. M.A. Jones and S.F. Cohen*. *Mathematics Teacher* 97, 3 (March 2004) 170-174. DOI: 10.5951/MT.97.3.0170
12. Connecting Fair Division and Game Theory through the Optimization of Knaster's Procedure. M.A. Jones *PRIMUS (Problems, Resources, and Issues in Mathematics Undergraduate Studies).* Vol XIII, 4 (Dec. 2003) 321-336. DOI: 10.1080/10511970308984066
11. Dynamic Models of Coalition Formation: Fallback vs. Build-Up. S.J. Brams, M.A. Jones, and D.M. Kilgour. *Graph Theory Notes of New York*, XLV (Nov. 2003), 32-40. also appeared in Proceedings of the Ninth TARK (Theoretical Aspects of Rationality and Knowledge) Conference, edited by M. Tennenholtz, (June 2003) 187-200.
10. Equitable, Envy-free, and Efficient Cake Cutting for Two People and Its Application to Divisible Goods. M.A. Jones, *Mathematics Magazine* 75, 4 (Oct, 2002) 275-283. DOI: 10.1080/0025570X.2002.11953144
9. Single-Peakedness and Disconnected Coalitions. S.J. Brams, M.A. Jones, and D.M. Kilgour. *Journal of Theoretical Politics* 14, 3 (July 2002) 361-386. DOI: 10.1177/095169280201400304
8. Reputation, Compliance, and International Law. G.W. Downs and M.A. Jones. *Journal of Legal Studies* (Special Issue on Rational Choice and International Law) 31, 1, Part 2 (Jan. 2002) S95-S114. DOI: 10.1086/340405
7. The Wallet Paradox Revisited. M. Carroll, M.A. Jones, and E. Rykken. *Mathematics Magazine* 74, 5 (Dec. 2001) 378-383. DOI: 10.2307/2691032
6. General Flip-Shift Games, J.G. Cheong*, M.A. Jones, and K. Kaneko*. *Pi Mu Epsilon Journal* 11, 5 (Dec. 2001) 229-239.

5. The Complexity of Artificial Grammars. E. Bollt and M.A. Jones. *Nonlinear Dynamics, Psychology, and Life Sciences* 4, 2 (April 2000) 153-168. DOI: 10.1023/A:1009524428448
4. Eliminating False Positives in a Cryptographic Method. A.M. Daddea* and M.A. Jones. *Pi Mu Epsilon Journal* 11, 3 (2000) 125-133.
3. Emphasizing Saddle Points through Game Theory: A Classroom Activity. J. Dorrington and M.A. Jones. *PRIMUS (Problems, Resources, and Issues in Mathematics Undergraduate Studies).* Vol X, 3 (2000) 206-218. DOI: 10.1080/10511970008965959
2. The Effect of Punishment Duration of Trigger Strategies and Quasifinite Continuation Probabilities for Prisoners' Dilemmas. M.A. Jones, *International Journal of Game Theory.* 28, 4 (1999) 533-546. DOI: 10.1007/s001820050124
1. Cones of Cooperation, Perron-Fröbenius Theory, and the Indefinitely Repeated Prisoners' Dilemma. M.A. Jones, *Journal of Mathematical Economics* 30, 2 (Sep. 1998) 187-206. DOI: 10.1016/S0304-4068(97)00021-9

Book Chapters/Collections

14. An iterative procedure for apportionment and its use in the 2016 Georgia Republican primary. M.A. Jones, D. McCune, and J. Wilson, in The Mathematical Analyses of Decisions, Voting and Games. (Ed. by M.A. Jones, D. McCune, and J. Wilson), *Contemporary Mathematics* 795, March 2024, p.153–187, AMS, Providence, RI. DOI: https://doi.org/10.1090/conm/795
13. From Primaries to Presidency M.A. Jones. Chapter 11 in For All Practical Purposes. Mathematical Literacy in Today's World. Eleventh edition. MacMillan Learning, January 2022. pp. 398–426.
12. Game Theory: The Mathematics of Competition M.A. Jones. Chapter 14 in For All Practical Purposes. Mathematical Literacy in Today's World. Eleventh edition. MacMillan Learning, January 2022. pp. 495–538.
11. Fair Division. M.A. Jones and A.D. Taylor. Chapter in For All Practical Purposes. Mathematical Literacy in Today's World. Eleventh edition. MacMillan Learning, January 2022. pp 428–452.
10. Game Theory. S. Brams and M.A. Jones. Chapter 15 in For All Practical Purposes. Mathematical Literacy in Today's World. Tenth edition. Freeman Press, December 2015. pp. 621-665.
9. Electing the President. S. Brams and M.A. Jones. Chapter 12 in For All Practical Purposes. Tenth edition. Freeman Press, December 2015. pp. 503-535.
8. The Dynamics of Consistent Bankruptcy Rules. M.A. Jones and J. Wilson. in The Mathematics of Decisions, Elections, and Games. (Ed. by K.D. Crisman and M.A. Jones), *Contemporary Mathematics*, AMS, September 2014. p. 207-229. DOI: https://doi.org/10.1090/conm/624
7. Nash Equilibrium (pure and mixed) M.A. Jones. Section 3.3.3.2 (17 pages) of Section 3.3 Game Theory (Ed. by D.M. Kilgour) of Encyclopedia of Operations Research and Management Science (Decision and Risk Analysis and Game Theory sections Ed. by T.A. Cox, Jr.), Wiley Science, January 2011. DOI: 10.1002/9780470400531.eorms0559
6. Bruhat Orders and the Sequential Selection of Indivisible Items. B. Hopkins and M.A. Jones. p. 273-285 in The Mathematics of Preference, Choice and Order: Essays in Honor of Peter C. Fishburn (Ed. by S. Brams, W.V. Gehrlein, and F.S. Roberts), Springer, January 2009. DOI: 10.1007/978-3-540-79128-7
5. Coloring and Counting Rectangles on the Board. M.A. Jones and M. Munakata. p.19-30 in Resources for Teaching Discrete Mathematics (Ed. by B. Hopkins), MAA Notes, Vol. 74, January 2009. DOI: 10.5948/UPO9780883859742.006
4. Discrete and Continuous Models for the Evolution of Lizard Populations. M.A. Jones and A. Mukherjee. Section 6.5, p. 340-348, in Mathematical Modelling: Education, Engineering and Economics (ICTMA 12), (Ed. by C. Haines, P. Galbraith, W. Blum, and S. Khan) Chichester: Horwood Publishing ISBN: 1-904275-20-6, 2006.
3. Integrating Combinatorics, Geometry, and Probability through the Shapley-Shubik Power Index. M.J. Haines and M.A. Jones. Section 3.4, p. 143-162, in Innovative Approaches to Undergraduate Mathematics Courses Beyond Calculus (Ed. by R.J. Maher), MAA Notes, Vol. 67, October 2005. DOI: 10.5948/UPO9781614443049.018
2. A Proofs Course that Transitions Students to Advanced, Applied Mathematics Courses. M.A. Jones and A. Mukherjee. Section 1.5, p. 39-52, in Innovative Approaches to Undergraduate Mathematics Courses Beyond Calculus (Ed. by R.J. Maher), MAA Notes, Vol. 67, October 2005.
1. Reputation, Compliance, and Development. G.W. Downs and M.A. Jones. Chapter 5, p. 117-133, in The Impact of International Law on International Cooperation: Theoretical Perspectives. (Ed. by Eyal Benvenisti and Moshe Hirsch), Cambridge University Press, September 2004. DOI: 10.5948/UPO9781614443049.007

Proceedings

6. Opportunities for Pre-College Students: Circles, Competitions, Fairs, and Longer Programs (Extended Abstract). Challenges of Mathematical Education: An American and Iranian Discussion. Proceedings of the US National Academy of Sciences and Iranian Academy of Sciences Symposium. (Ed. by Donald Saari), January 27-29, 2014, Irvine, CA.
5. The Geometry Behind Paradoxes of Voting Power. M.A. Jones. Proceedings of the DIMACS-LAMSADE Workshop on Voting Theory and Preference Modeling, Annales du LAMSADE, No. 6, October 2006, 193-209 (ISSN 1762-455X).
4. A Sophomore-Level Transitions Course: Pedagogy, Projects, and Evaluation. M.A. Jones, A. Mukherjee, and G. Weinstein. Proceedings of the Hawaii International Conference on Statistics, Mathematics, and Related Fields,

June 9-12, 2004.

3. The Mathematical Control of Sleep/Wake Cycles. M.A. Jones and D. Thomas. Proceedings of the Second Regional Conference on Quantitative Reasoning Across the Disciplines, 95-123. March 6, 1999.
2. Communication Networks with Varying Capacities: Examples and the Effects of Variance. M.A. Jones, Proceedings of the Fourth Annual Army Research Lab (ARL)/USMA Technology Symposium, October 1996.
1. An Infinite Horizon Dynamic Programming Approach to Communication Networks with Varying Capacities. M.A. Jones and C. Pehlivanian. Proceedings of the Third Annual ARL/USMA Technology Symposium, November 1995.

Smalls

13. Media Clip: Significant Numbers. M.A. Jones. *Mathematics Teacher*. 110, 5 (Dec. 2016/Jan. 2017) 330-331. DOI: 10.5951/mathteacher.110.5.0330
12. Mathematics and elections (crossword puzzle). M.A. Jones and J. Wilson. *Mathematics Magazine*. 89, 4 (Oct. 2016) 289-290. DOI: 10.4169/math.mag.89.4.289 11. Editors past and president, part II (crossword puzzle). T. Bennett and M.A. Jones. *Mathematics Magazine*. 88, 4 (Oct. 2015) 270-271. DOI: 10.4169/math.mag.88.4.270
10. Media Clips: Playing Winless Teams and Ranking the Safest US Cities. M.A. Jones and J.M. Wilson. *Mathematics Teacher*. 108, 5 (April 2015) 568-571. DOI: 10.5951/mathteacher.108.8.0568
9. Media Clips: Rounding at the register and How old is your cat or dog?. M.A. Jones and J.M. Wilson. *Mathematics Teacher*. 108, 2 (Sep. 2014) 88-91. DOI: 10.5951/mathteacher.108.2.0088
8. Proof by Picture: The Number of Ways to Write a Positive Integer as the Sum of Two or More Consecutive Positive Integers. M.A. Jones. *Mathematics and Computer Education* 48, 2 (Spring 2014) 138-139.
7. Arrow's Impossibility Theorem. M.A. Jones p. 587-589 in The Pi Mu Epsilon 100th Anniversary Problems: Part I. S.J. Miller, J.M. Andrews, and A.T. Carr. *Pi Mu Epsilon Journal* 13, 10 (Spring 2014) 577-608.
6. Media Clips: A Rare July? and Fibonacci Takes to the Air. M.A. Jones and B.C. Shelton*. *Mathematics Teacher* 106, 7 (March 2013) 492-495. DOI: 10.5951/mathteacher.106.7.0492
5. Proof without Words: The Square of a Balancing Number is a Triangular Number. M.A. Jones. *College Math Journal*. 43, 3 (May 2012) 212. DOI: 10.4169/college.math.j.43.3.212
4. Mathematical Minute: Removing a Dot. M.A. Jones. *College Mathematics Journal* 42, 2, (Mar. 2011) 139. DOI: 10.4169/college.math.j.42.2.139
3. Partitioning Triangular Numbers. M.J. Haines and M.A. Jones. *College Mathematics Journal* 34, 4 (Sep. 2003) 295.
2. Proof without Words: Nonnegative Integer Solutions and Triangular Numbers. M.J. Haines and M.A. Jones, *Mathematics Magazine* 75, 5 (Dec. 2002) 388. DOI: 10.1080/0025570X.2002.11953933
1. Proof of a 'Possibly New' Definition of a Circle in Reader Reflections. M.A. Jones. *Mathematics Teacher* 95, 8 (Nov. 2002) 642.

Peer-Reviewed Newsletters

5. Reviewing for Mathematical Reviews. (updated version of #4 below). M.A. Jones. *MAA Focus*, 32, 2 (2012) 10-11.
4. Service Opportunity: Reviewing for Mathematical Reviews/MathSciNet. M.A. Jones. *Michigan Section MAA Newsletter*, 36, 2 (2010) 12-15.
3. Mathematics in Voting Theory at the 2008 Joint Meetings. E. Gottlieb, B. Hopkins, and M.A. Jones. *MAA Focus*, 28, 3 (2008) 15-17.
2. The Job Talk. M.A. Jones and K. Saxe. *MAA Focus*, 27, 8 (2007) 16-17.
1. Interviewing for a Job in Academia. T. Hull, M.A. Jones, and D. Thomas. *Notices of the AMS* (1998) 1353-1357.

Book Reviews

4. Games and Decision Making by Aliprantis and Chakrabarti. Spring 2002: *Math. and Computer Educ.* 36(2):195-197.
3. The Mathematical Universe by W. Dunham. Fall 1999: *Math. and Computer Educ.* 33(3):298-300.
2. Calculating and Computing for Social Science and Arts Students by R. Solomon and C. Winch. Winter 1996: *Math. and Computer Educ.* 30(1):107-108.
1. Introduction to Analysis (4th Edition) by E. Gaughan. Fall 1995: *Math. and Computer Educ.* 29(3):330-331.

Presentations (140 presentations)

From Fractions to Fairness: On the Sequential Apportionment of House Seats

- Rose-Hulman Undergraduate Mathematics Conference. Terre Haute, IN. Mar. 2025.
- Mathematics Department Colloquium. Albion College, Albion, MI. Feb. 2025.

Sequential Apportionments from Stationary Divisor Methods

- AMS Contributed Paper Session on History, Biography, Logic and Foundations, JMM, Seattle. Jan. 2025.
- Session on Fair Division and Algorithms, Public Choice Society. Louisville, KY. Mar. 2025

From Fractions to Fairness: Rounding in the Apportionment of House Seats and Delegates

- Mathematics Department Colloquium. Albion College, Albion, MI. Nov. 2024.
- Mathematical Encounters. National Museum of Math, New York, NY. Oct. 2024.

Equilibria for the Penney Ante Game with a Biased Coin for Both Sequential and Simultaneous Moves

- Recreational Mathematics: Puzzles, Card Tricks, Games, and Gambling, MathFest, Indianapolis. Aug. 2024.

The Structure of Fair Division Problems: Context is Key
- Webinar: Is there a Mathematical Formula for Fairness? National Academies of Sciences, Engineering, and Medicine. Jun. 2024.

The Fundamentals of Markov Chains through Applications
- EPaDel Spring meeting, EPaDel section of the MAA, Albright College, PA. Apr. 2024.
- Mathematics Department Colloquium. Albion College, Albion, MI. Apr. 2024.

The Will Rogers Phenomenon and Sequential Migration
- Mathematics Department Colloquium. Albion College, Albion, MI. Oct. 2023.

Delegate Apportionment Methods: The Quota Condition, Bias, and Thresholds
- Applied Mathematics, Modeling and Computational Science (AMMCS). Waterloo, Canada. Aug. 2023.

A Game Theoretic Approach to the Penney-Ante Game
- Mathematics Department Colloquium. Albion College, Albion, MI. Feb. 2023.

Playing Catch Up on *The Chase* and Bertrand's Ballot Problem
- Mathematics Department Colloquium. Albion College, Albion, MI. Oct. 2022.

The Colley Method is an Extension of the Borda Count
- AMS Special Session on Mathematics and Sports. Virtual Joint Math Meetings, April 2022.

The Berge Decomposition for Bimatrix Games
- AMS Special Session on Math. of Decisions, Elections and Games. Virtual Joint Math Meetings, April 2022.

Equilibria for the Wallet Game and the Paradoxical Role of Zero
- AMS Special Session on the Mathematics of Decisions, Elections, and Games. Joint Math Meetings, Jan. 2024.
- Mathematics Department Colloquium. Albion College, Albion, MI. Feb. 2022.

On Euclid's Game: The Fractal Structure of Losing Positions in the Calkin-Wilf Tree
- Mathematics and Statistics Department Colloquium. Hope College, Holland, MI. Feb. 2023.
- Mathematics Department Colloquium. Albion College, Albion, MI. Nov. 2021.

Elections and Representation
- Invited plenary presentation. MSRI Workshop on Mathematics and Racial Justice (Virtual). June 2021.

Fair Division and Allocation
- Invited plenary presentation. MSRI Workshop on Mathematics and Racial Justice (Virtual). June 2021.

Allocating Scarce Resources using a Weighted Lottery
- Mathematics (Virtual) Department Colloquium. Albion College, Albion, MI. Feb. 2021.

How to Tally Votes, Let Me Count the Ways
- Invited public lecture. William Jewell College, Liberty, MO. Feb. 2020.

New Quota-based Apportionment Methods: The Allocation of Delegates in the Republican Presidential Primary
- Applied Mathematics, Modeling, & Computational Science (AMMCS). Waterloo, Ontario. Aug. 2019.

Newton-like Identities from Synthetic Division
- REU Program Colloquium. Lafayette College, Easton, PA. June 2019.
- Mathematics Department Colloquium. Albion College, Albion, MI. Apr. 2019.

Reducibility and Balanced Intransitive Dice
- Mathematics Department Colloquium (joint with M. Ivanitskiy). Albion College, Albion, MI. Sep. 2018.

A Mechanism Design Approach to Allocating Travel Funds
- Mathematics Department Colloquium. Albion College, Albion, MI. Feb. 2018.

All Parabolas Through Three Non-collinear Points
- Mathematics Department Colloquium. Albion College, Albion, MI. Nov. 2017.

An Axiomatic Characterization of Child Support Formulas
- Applied Mathematics, Modeling, & Computational Science (AMMCS). Waterloo, Ontario. Aug. 2017.

The Mathematics of Apportionment in U.S. Presidential Primaries and the General Election
- Mathematics Department Colloquium. Albion College, Albion, MI. Nov. 2016.
- Mathematics Department Colloquium. Alma College, Alma, MI. Nov. 2016.

Playing Cards, Triangles, and Algebraic Structures
- Mathematics Department Colloquium. U.S. Military Academy, West Point, NY. Oct. 2016.

The Calculus of Generic Drug Equivalence
- Mathematics Department Colloquium. Albion College, Albion, MI. April 2016.

Dividing Child Support Funds Between Parents
- MAA Invited Paper Session on Fair Division. AMS/MAA Joint Meetings, Seattle, WA, Jan. 2016.

Tennis Ranking Over Time
- MAA Contributed Session on Math and Sports. AMS/MAA Joint Meetings, Seattle, WA. Jan. 2016.
- Mathematics Department Colloquium. Albion College, Albion, MI. Nov. 2015.

Dynamics and Geometry of Three-Player Bankruptcy Rules
- Fall AMS Eastern Section meeting. Rutgers University, NJ. Nov. 2015.

Counting with Fractals and the Mysterious Triangles of Behrends and Humble

- Recreational Mathematics Contributed Paper Session. MAA MathFest. Washington, D.C. Aug. 2015.
- Mathematics Department Colloquium. Albion College, Albion, MI. Feb. 2015.

Writing for MAA Journals and Magazines
- Panel discussion. MAA New Jersey section meeting. Jersey City, NJ. Nov. 2014.
- Panel discussion. MAA MathFest. Portland, OR. Aug. 2014.

The Colley Matrix Method as an Extension of the Borda Count
- Workshop on Fair Division, Voting and Computational Complexity. Univ. of Graz, Austria. April 2014.
- Mathematics Department Colloquium. Albion College, Albion, MI. Feb. 2014.

Triangle Mysteries and Other Tricks
- Michigan Math Circle. (over 2 sessions) University of Michigan, Ann Arbor, MI. Mar. 2014.

Adjusting Child Support Payments in Michigan
- MAA Michigan Section Meeting. Flint, MI. May 2014.
- MAA Contributed Session on Calculus. AMS/MAA Joint Meetings, Baltimore, MD. Jan. 2014
- Mathematics Department Colloquium. Albion College, Albion, MI. Nov. 2013.

Opportunities for Pre-College Students: Circles, Competitions, Fairs, and Longer Programs
- US National Academy of Sciences/Iranian Academy of Sciences meeting. Irvine, CA. Jan. 2014.

Geometric Analysis of Three-Claimant Dynamic Bankruptcy Rules
- Applied Mathematics, Modeling and Computational Science (AMMCS). Waterloo, Canada. Aug. 2013.

Permutations and Puzzles
- Michigan Math Circle. (over 2 sessions) University of Michigan, Ann Arbor, MI. Mar. 2013.

The National Football League's Overtime Rule Revisited
- MAA Session on Mathematics and Sports. AMS/MAA Joint Meetings, San Diego, CA. Jan. 2013.

What does Fairness have to do with Cake and Chicken?
- Mathematics Department Colloquium. Albion College, Albion, MI. Nov. 2012.

Chutes and Ladders for the Impatient.
- Mathematics Department Colloquium. Albion College, Albion, MI. April 2012.

Modules on Modular Arithmetic
- Michigan Math Circle. (over 2 sessions) University of Michigan, Ann Arbor, MI. Feb. 2012.

On Consistent Bankruptcy Rules
- AMS Special Session on Math of Decisions, Elections & Games. Joint Math Meetings, Boston, MA. Jan. 2012.
- Mathematics Department Colloquium. Albion College, Albion, MI. Nov. 2011.

The Cut-Off Paradox: Apportionment in the Democratic Primary
- Midwest Political Science Association. Chicago, IL. April 2011.

Games and Their Connections to Numbers
- Mathematics Department Colloquium. Albion College, Albion, MI. April 2011.
- Michigan Math Circle. (over 2 sessions) University of Michigan, Ann Arbor, MI. March 2011.

Utility Theory and *Deal or No Deal*
- Mathematics Department Colloquium. Albion College, Albion, MI. Nov. 2010.
- Contributed Session on Advances in Recreational Mathematics. MAA MathFest, Lexington, KY. Aug. 2011.

A New Look at the New States Paradox: Apportionment in the Democratic Primary
- Contributed Paper Session. MAA Michigan Section, Eastern Michigan University, Ypsilanti, MI. May 2010.

The Evaluation and Comparison of Thresholds for Divisor Methods
- AMS Special Session on Voting Theory. AMS/MAA Joint Meetings, San Francisco, CA. Jan. 2010.

Cutoffs and Thresholds in the Democratic Primary
- Mathematics Department Colloquium. Albion College, Albion, MI. Nov. 2009.

Minimal Requirements for Representation under Apportionment Methods
- Public Choice Society Meetings. Las Vegas, NV. March 2009.

The Super Bowl Box Pool
- 22nd International Conference on Technology in Collegiate Mathematics (ICTCM). Chicago, IL. Mar. 2010.
- Mathematics Department Colloquium. Albion College, Albion, MI. Jan. 2009.
- MAA Session on Mathematics and Sports. AMS/MAA Joint Meetings, Washington, DC. Jan. 2009.

Multilinear Extensions and Semivalues for Multichoice Games
- Game Theory Society meetings. Evanston, IL. July 2008.

Bruhat Orders and the Sequential Selection of Indivisible Items.
- Social Choice and Welfare. Montreal, Canada. June 2008.

From Decision Theory to Game Theory: An Overview with Applications
- Graduate Student Seminar. Stevens Institute of Technology, Hoboken, NJ. Apr. 2008
- MAA Short Course on Game Theoretic Modeling and Applications. Madison, WI. July 2008.

Re-distributing and Reconstructing Probabilities in Horse Races, Voting Theory, and Poker
- Contributed Paper Session on Mathematics and Voting Theory. MAA New Jersey, Paterson, NJ. April 2008.

• Contributed Session on Advances in Recreational Mathematics. MAA MathFest, Madison, WI. July 2008.

What a Difference a Procedure Makes: Scoring Rules in Politics and Sports

• Mathematics Awareness Month. Cornell University, Ithaca, NY. Apr. 2008.
• Mathematics Awareness Month. New Jersey City University, Jersey City, NJ. Apr. 2008.

Successful Mentoring of Undergraduate Students on Research Projects

• Center for Teaching and Learning. Montclair, NJ. Jan. 2008.
• MAA Session on Research and Professional Development Activities for Math Majors. AMS/MAA Joint Meetings, San Diego, CA. Jan. 2008.

A Sports Trilogy: The Application of Mathematics to Football, Golf, and Horse Racing

• Mathematics Department Colloquium. Towson University. Baltimore, MD. Dec. 2007.

Some Recent Results on Pie Cutting

• Invited. Dagstuhl Seminar 07261 Fair Division. Wadern, Germany. June 2007.

Portfolio Selection as a Nash Bargaining Game

• AMS Session on Applications of Mathematics, II. AMS/MAA Joint Meetings, New Orleans, LA. Jan. 2007.

Graph Theory and Finite Dynamical Systems from Solitaires and Games

• Invited plenary speaker. Graph Theory Day 51. Montclair State University. Montclair, NJ. May 2006.

Shift-Induced Dynamical Systems on Compositions and Partitions

• Mathematics Colloquium. Southern Illinois University Carbondale. Carbondale, IL. Apr. 2006.

A Voting Theory Approach to Golf Scoring

• Invited plenary speaker. Loiusiana-Mississippi Section of the MAA. Clinton, MS. Feb. 2019.
• Invited plenary speaker. New Jersey Section of the MAA. Mount Laurel, NJ. Apr. 2018.
• Invited plenary speaker. IL-IN-MI Tri-Sectional MAA Meeting. Valparaiso, IN. Mar. 2018.
• Invited plenary speaker. Northeastern Section of the MAA. Northfield, VT. Jun. 2017.
• Mathematics Department Colloquium. Albright College. Alma, MI. Apr. 2017.
• Mathematics Department Colloquium. Augsburg College. Minneapolis, MN. Mar. 2017.
• Mathematics Department Colloquium. Alma College. Alma, MI. Nov. 2014.
• Mathematics Department Colloquium. Eastern Michigan University. Ypsilanti, MI. Nov. 2013.
• Math Club Colloquium. University of Michigan. Ann Arbor, MI. Mar. 2009.
• Mathematics Department Colloquium. Albion College. Albion, MI. Nov. 2008.
• Invited. MAA Special Session on Gems in Applied Mathematics. MathFest. San Jose, CA. Aug. 2007.
• Mathematics Department Colloquium. Adelphi University. Garden City, NY. Apr. 2007.
• Mathematics Department Colloquium. Manhattan College. Bronx, NY. Nov. 2006.
• Mathematics Department/Kappa Mu Epsilon Colloquium. Monmouth University, NJ. Nov. 2006.
• Mathematics Student Colloquium. Southern Illinois University Carbondale. Carbondale, IL. Apr. 2006.
• Pi Mu Epsilon Induction Ceremony. Saint Peter's College. Jersey City, NJ. Apr. 2006.

Proportional Pie-Cutting

• AMS Contributed Paper Session, AMS/MAA Joint Meetings, San Antonio, TX. Jan. 2006.
• International Game Theory Conference. 16th Summer Festival on Game Theory. Stony Brook, NY. July 2005.

Scoring Rules for Golf

• MAA Session on Mathematics of Sports and Games, AMS/MAA Joint Meetings, San Antonio, TX. Jan. 2006.

Geometric Classification of Paradoxes of Voting Power

• MAA Session on Applications of Discrete Math. AMS/MAA Joint Meetings, New Orleans, LA. Jan. 2007.
• LAMSADE/DIMACS Workshop on Voting Theory and Preference Modeling, University of Paris Dauphine, Paris, France. Oct. 2006.
• Voting Power and Procedures Programme Workshop, University of Warwick, UK. July 2005.
• Public Choice Society Meetings, New Orleans, LA. Mar. 2005.
• MAA NJ Section Meeting: Session on Applications to Social Sciences and Finance, Middlesex, NJ. Mar. 2005.

Dynamics of Nim Induced Difference Equations

• AMS-SIAM Special Session on Dynamic Equations on Time Scales; Integer Sequences and Rational Maps. AMS/MAA Joint Meetings, Atlanta, GA. January 2005.
• Department of Mathematics Colloquium, Clarkson University, Potsdam, NY. Jan. 2005.
• Department of Mathematics and Computer Science Colloquium, Lafayette College, Easton, PA. Feb. 2005.
• Department of Mathematics Colloquium, Adelphi University, Garden City, NY. Feb. 2005.
• Department of Mathematics Colloquium, SUNY Orange, Middletown, NY. Apr. 2005.

Sequences of P/N Positions in Nim without Preperiods.

• Contributed Paper in Advances in Recreational Mathematics, MAA MathFest, Providence, RI. Aug. 2004.

Perfect Cake-Cutting Procedures with Money.

• Public Choice Society Meetings, Baltimore, MD. March 2004.

Forming Stable Coalitions from Preferences over Coalition Partners.

• AMS Special Session on The Many Lives of Lattice Theory and the Theory of Ordered Sets, with

Connections to Combinatorics, AMS/MAA Joint Meetings, Phoenix, AZ. Jan. 2004.

Whether You Win or Lose, It's How the Overtime is Played: A Markov Chain Analysis of the NFL's Overtime Rules.

- MAA Session on Mathematics and Sports, AMS/MAA Joint Meetings, Phoenix, AZ. Jan. 2004.

A Sophomore-Level Transition Course

- Poster Session for NSF DUE Grants, AMS/MAA Joint Meetings, Phoenix, AZ. Jan. 2004.

Using the Writing Process to Help Teach the Mathematical Modeling Process.

- MAA Session on Mathematical Modeling, AMS/MAA Joint Meetings, Baltimore, MD. Jan. 2003.

A Common Question Yields an Answer in Content: Finding the NCTM Content Standards in Undergraduate Mathematics.

- MAA Contributed Paper Session, AMS/MAA Joint Meetings, Baltimore, MD. Jan. 2003.

Optimization of Knaster's Procedure and How to Use it as a Transition to Game Theory for a Liberal Arts Math Course

- Invited, Session on Innovative Methods in Courses Below Calculus, MathFest, Burlington, VT. Aug. 2002.

Forming Stable Coalitions: The Process Matters.

- Public Choice Society Meetings, San Diego, CA. March 2002.
- American Political Science Association Meetings, Boston, MA. Sep. 2002.

Equitable, Envy-free, and Efficient Cake Cutting for Two People and Its Application to Discrete Goods.

- Contributed paper session, AMS/MAA Joint Meetings, San Diego, CA. Jan. 2002.
- Panel on Fair Division, Society for Economic Design Meetings, New York, NY. July 2002.
- Invited, Department of Mathematics Colloquium, Adelphi University, Garden City, NY. November 2002.

The Mathematics of Flip-Shift Puzzles.

- Invited to speak in Science Seminar Series, Sarah Lawrence College, Bronxville, NY. Oct. 2001.
- As part of the CSAM Visiting Professor Series, Dover High School, Dover, NJ. Dec. 2001.

Integrating Combinatorics, Geometry, and Probability through the Shapley-Shubik Power Index

- Contributed Paper on Innovative Methods Beyond Calculus, MAA MathFest, Madison, WI. Aug. 2001.

Geometric Implications of the Shapley-Shubik Power Index

- Public Choice Society Meetings, San Antonio, TX. Mar. 2001.
- International Game Theory Conference. 12th Summer Festival on Game Theory. Stony Brook, NY. July 2001.

The Paradox of Disconnected Coalitions

- Midwest Political Science Association Annual Meetings. Chicago, IL. Apr. 2000.
- International Game Theory Conference. 11th Summer Festival on Game Theory. Stony Brook, NY. July 2000.

The Effect of Uncertainty and Punishment on Cooperation in Repeated Prisoners' Dilemmas

- Mathematics Department Colloquium, Towson University. Towson, MD. Dec. 2000.
- Mathematics Department Colloquium, Hunter College (CUNY). New York, NY. Mar. 2000.

A Continuous Version of the Dodgson Winner

- Mathematical Association of America: New Jersey Section Meeting. Trenton, NJ. Apr. 1999.

The Mathematical Control of Sleep/Wake Cycles

- Invited to speak as part of a Contributed Paper Session at MathFest (MAA), Providence, RI. July 1999.
- Invited to speak at Mathematics Awareness Month. University of Scranton. Scranton, PA. Apr. 1999.
- Second Regional Quantitative Reasoning Across the Disciplines Conference. Stockton College, NJ. Mar. 1999.

Perron-Fröbenius Theory and the Repeated Prisoner's Dilemma.

- American Mathematical Society Joint Meetings. San Diego, CA. Jan. 1997.

Developing Symbolic Dynamics to Measure the Complexity of Repeated Game Strategies by Topological Entropy.

- Midwest Mathematical Economics and International Trade Meetings. St. Louis, MO. Oct. 1996.

Communication Networks with Varying Capacities: Examples and the Effects of Variance.

- Fourth Annual ARL/USMA Technology Symposium. Adelphi, MD. Oct. 1996.

The Classification of Continuation Probabilities.

- International Game Theory Conference. 7th Summer Festival on Game Theory. Stony Brook, NY. July 1996.
- Social Choice and Welfare. Maastricht, Netherlands. June 1996.
- American Mathematical Society Joint Meetings. San Francisco, CA. Jan. 1995.

A Dynamic Model of a Continuous Blotto Game that leads to Extreme, Close Policy Positions.

- International Workshop on Game Theory and Politics. Santiago de Compostela, Spain. July 1996.
- Public Choice Society Conference. Houston, TX. Mar. 1996.

Cones of Cooperation for Indefinitely Repeated, Generalized Prisoner's Dilemma Games.

- New Directions in the Theory of Markets & Games (In Honor of Aumann). Toronto, Canada. Oct. 1995.
- Midwest Mathematical Economics and International Trade Meetings. Minneapolis, MN. Oct. 1995.
- Public Choice Society Conference. Long Beach, CA. Mar. 1995.

An Infinite Horizon Dynamic Programming Approach to Comm. Networks with Varying Capacities.

- Third Annual ARL/USMA Technology Symposium. Nov. 1995.

Cones of Cooperation and Their Use to Substantiate Intuition and Compare Correlated Strategies.

- Southeast Economic Theory and International Trade Conference. Charlottesville, VA. Nov. 1994.
- Midwest Mathematical Economics and International Trade Meetings. Ann Arbor, MI. May 1994.

(Selected) Organized Events (Organizer, unless noted; AMS = American Math Society; JMM = Joint Math Meetings; AAAS = American Association for the Advancement of Science)

- AMS Special Session: Math. of Decisions, Elections, and Games, Joint Math Meetings
  - Seattle, WA. Jan. 2025
  - San Francisco, CA. Jan. 2024
  - Boston, MA. Jan. 2023
  - virtual JMM, April 2022
  - Denver, CO. Jan. 2020
  - Baltimore, MD. Jan. 2019.
- AMS Special Session: Math. of Decisions, Elections, and Games. Central Section Mtg, Ann Arbor, MI, Oct. 2018.
- MAA Invited Paper Session: Fair Division, JMM, Seattle, WA, Jan. 2016.
- MAA Invited Paper Session: Mathematics and Voting, JMM, San Antonio, TX, Jan. 2015.
- AMS Special Session: Math. of Decisions, Elections, and Games, JMM, San Diego, CA, Jan. 2013.
- AMS Special Session: Math. of Decisions, Elections, and Games, JMM, Boston, MA, Jan. 2012.
- AAAS Symposium: Math. and the Analysis of Fairness in Political Processes, San Diego, CA, Feb. 2010.
- AMS Special Session: Voting Theory, Joint Math Meetings
  - San Francisco, CA, Jan. 2010.
  - San Diego, CA, Jan. 2008.
- MAA Short Course on Game Theory, MathFest, Madison, WI, Aug. 2008.
- Secondary Lecturer, Rutgers/DIMACS Reconnect Satellite Conference, Montclair, NJ, June 2005.
- Organizer/Presider, MAA-NJ Contributed Paper Session, Popular and Recreational Math, Mar. 2004.
- Co-Organizer/Presider, MAA General Contributed Paper Session, JMM, Phoenix, AZ, Jan. 2004.
- Organizer/Presider, MAA General Contributed Paper Session, JMM, Baltimore, MD, Jan. 2003.

Additional Service for Mathematical Association of America

- Member, Search Committee for *College Mathematics Journal* Editor, Spring 2007.
- Book Sale Coordinator, NJ Section of the MAA, 2003-2007.
- Public Information Officer (including Webmaster), NJ Section of the MAA, 2003-2005.

Other Experience and Service

- Referee for *Discrete Mathematics*, *Discrete Applied Mathematics*, *European Journal of Operational Research*, *Games and Economic Behavior*, *Mathematics Magazine*, *Journal of Theoretical Politics*, *Brain Research Bulletin*, *Social Choice and Welfare*, *PRIMUS*, *Journal of Politics*, Computer Information Systems Conference 2004, *College Mathematics Journal*, and *Mathematical Social Sciences*.
- External reviewer for 3 tenure cases: 2011 (1); 2012 (2).
- Graded, by invitation, the 56th, 59th, 60th, 62nd, 65th, 67th, 69th through 82nd Annual International William Lowell Putnam Competitions, Decembers 1995, 1998, 1999, 2001, 2004, 2006, 2008, 2009, and 2011–2022.
- Graded, by invitation, the Michigan Math Prize Competition. Albion College, MI. 2012 and 2013.
- Judged, by invitation, the 28th, 29th, 31st, 32nd, 33rd, 35th, and 36th Annual Greater Metropolitan New York Area Math Fairs. Pace University, NY. March of 1996, 1997, 1999, 2000, 2001, 2003, and 2004.
- Research Advisor (to 2 high school students); Weston Scholars Science program; Summer 2005. Lecturer; Summers 2004 and 2006.
- Panel Member for Project NexT's Fun, Fame, and Fortune: Advising Students on Mathematical Competitions; Joint Meetings, Phoenix, AZ, January 2004.
- Member of the Doctoral Committee (preparing proposal for a doctoral program), AYs 2004-2008.
- Member of Pure and Applied Math Search Committee, AYs 2002-2006.
- Member of Department Personnel Advisory Committee - evaluate candidates for reappointment, tenure, and promotion, AYs 2003-2007.
- Member of the Undergraduate Curriculum Committee, AY 2002-2003.
- Chairperson of the Special Interest Group in Pure and Applied Mathematics in the Department of Mathematical Sciences at Montclair State University. AYs 2000-2002.
- Member of the Assistant Dean Search Committee, AY 2001-2002.
- Math 106 Course Coordinator AYs 2000-2007. Wrote the accepted GER proposal for this course.
- Academic Adviser to 15 undergraduate students, each semester at Montclair State University.
- Math Club Adviser; Montclair State University, Montclair, NJ. Academic Years 1998-2000. Initiated Biweekly Mathematics Problem Contest.
- Faculty Sponsor for a team in the COMAP Mathematical Competitions in Modeling. February 1999 & 2001.
- Math Club Adviser; Loyola University, Chicago, IL. AY 1997-1998.
- Pi Mu Epsilon Honor Society Faculty Adviser; Loyola University, Chicago, IL. AY 1997-1998.
- Member of MBA Thesis Committee; Mt. Saint Mary College, Newburgh, NY. Fall 1996.
- Research: Army Research Labs, Directorate of Signals and Information Technology. Summers 1995 and 1996.
- Editor, *Mathematica Militaris*, Bulletin of the Math Depts of the Federal Service Academies. 1994 - 1996.
- Organized an interdisciplinary seminar with faculty in Economics, Mathematics, and Computer Science, USMA, AY 1995-1996.

Popular Press Coverage

• Mathematical result from "All Parabolas through Three Non-collinear Points" by Huddy and Jones (Mathematical Gazette 102, July 2018, 203-209). motivated artwork by David Reimann (Parabolas, 3D print, 20 x 20 x 20 cm, 2019). The artwork depicts a small sample of the infinite number of parabolas that pass through three points. Three control points are rotated around the z-axis resulting in three rings. A parabola exists with an axis of symmetry at every angle in the range $[0, \pi]$ except the three where a pair of the control points are co-linear. The parabola with an axis of symmetry at an angle theta is associated with a parabola in the sculpture in the xz-plane rotated around the z-axis by an angle twice theta. See https://www.ams.org/publicoutreach/math-imagery/2020-Exhibition

• Interviewed on Weekly Recap with Bitchin' Dave for Fins Radio (http://www.blogtalkradio.com/finsradio – part of the Miami Dolphins Fan Network) about a mathematical model for the Super Bowl Box Pool; Original Air Date: 2/3/2010 9:00 AM

• Interviewed on Weekly Recap with Bitchin' Dave for Fins Radio (http://www.blogtalkradio.com/finsradio – part of the Miami Dolphins Fan Network) about mathematically modeling proposed NFL overtime rule changes; Original Air Date: 5/6/2009 8:30 PM

• Review of The Sprinkler Problem: A Mathematician Waters the Lawn by Jones and Stonick (a graduate student) appeared in *Media Highlights* of the November 2007 issue of *College Mathematics Journal*; page 402.

• Ben Stein (American Institute of Physics) refers to The Pythagorean Theorem of Baseball and Alternative Models in Inside Science News Service "Streamlining the 'Pythagorean Theorem of Baseball'" (3/29/04): http://www.aip.org/isns/reports/2004/007.html

• Wall Street Journal's Science Journal "Pigskin Overtime Rules And Beaned Batters Spur Math Theorems" by Sharon Begley refers to the articles:

Win, Lose, or Draw: A Markov Chain Analysis of the National Football League's Overtime Rules and

The Pythagorean Theorem of Baseball and Alternative Models

(1/9/04; pA07, first page of Market Place section)

• Nature Online's "Cake Cutting Perfected" by Philip Ball refers to the article: Perfect Cake-Cutting Procedures with Money (1/7/04): http://www.nature.com/nsu/040105/040105-3.html

• Appeared on the national radio program, "Math Medley," as part of the program: Mathematics Reform at the University Level. February 1999.

Selected Press (of over 40 references) for Better Ways to Cut a Cake by Brams, Jones, and Klamler

• Featured in The Kindest Cut: Always do the math before you divvy by Steve Mirsky, Scientific American, February 2007, p.94.

• Interviewed for Science Talk by Steve Mirsky (Scientific American podcast); aired January 17, 2007: Better Ways To Cut A Cake and To Pick A Champion

• Featured in "This Math Theory is a Piece of Cake" by Kitta Macpherson; page 2 of the Sunday Star-Ledger (Newark) November 26, 2006.

• Interviewed for the Canadian Broadcasting Corporation's Quirks and Quarks radio program; the interview aired on November 17, 2006 and appears on the internet at: http://www.cbc.ca/quirks/archives/06-07/nov18.html

• Discovery Channel Beyond (online); video demonstration of the Surplus Procedure from Better Ways to Cut a Cake. Link: http://dsc.discovery.com/beyond/player.html – type in "cake" under Video Search.

• Sharing Your Cake - and Eating It, Too. Scientific American (online).
Link: http://www.sciam.com/article.cfm?articleID=BE6C72AB-E7F2-99DF-31646B192A04E597&sc=I100322

Professional Societies and Organizations

• Currently: Mathematical Association of America (over 30 years), American Mathematical Society (now a lifetime member).

• Previously: Game Theory Society, Society for Chaos Theory in Psychology and the Life Sciences, American Economic Association, Society for Economic Design, Society for Social Choice and Welfare, Public Choice Society, and National Council of Teachers of Mathematics.

References

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