GLENN H. HURLBERT

Curriculum Vitae

Apr 4, 2025

Department of Mathematics & Applied Mathematics
Virginia Commonwealth University
Richmond, VA 23284-2014

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EDUCATION

May 1990   Ph.D. in Mathematics (Combinatorics)
Rutgers University, New Brunswick, NJ
Dissertation Advisor: Ronald Graham, AT&T Bell Laboratories
Dissertation Title: Universal cycles, on beyond De Bruijn

May 1988   M.A. in Pure Mathematics
State University of New York, Stony Brook, NY
Advisor: Joel Spencer

May 1984   B.S. in Mathematics (Minor in Computer Science)
Wake Forest University, Winston-Salem, NC

PROFESSIONAL EXPERIENCE

Primary

Jan 2022 – Present   Professor, Department of Mathematics and Applied
Mathematics, Virginia Commonwealth University

Jul 2014 – Dec 2021   Professor & Chair, Department of Mathematics and Applied
Mathematics, Virginia Commonwealth University

Apr 2012 – Jun 2014   President's Professor, School of Mathematical and Statistical
Sciences, Arizona State University

Aug 2010 – Apr 2012   Professor, School of Mathematical and Statistical Sciences,
Arizona State University
   (*Sabbatical Leave: Fall 2011*)
   (*Sabbatical Leave: Fall 2004 – Sum 2005*)
   (*Medical Leave: Spr 2002*)
   (*Sabbatical Leave: Fall 1996 – Sum 1997*)

Jan 2007 – Jun 2014   Barrett Honors College Visiting Fellow,
Arizona State University

May 2002 – May 2004   Associate Chair, Department of Mathematics and Statistics,
Arizona State University

Aug 1996 – Jul 2010   Associate Professor, School of Mathematical and Statistical
Sciences, Arizona State University

Aug 1990 – Jul 1996   Assistant Professor, Department of Mathematics and
Statistics, Arizona State University

Secondary

Sum 2012	Director, ASU Summer Mathematics Institute, Arizona State University
Sum 2010	Director, Westwood Summer Scholars Institute in Mathematics, Mesa Public Schools, Mesa, AZ
Sum 2001	Co-Director, Summer Teachers Institute in Mathematics, Arizona State University
Spr 1997 – Spr 1998	Education Director, DIMACS Research and Education Institute, Rutgers University, New Brunswick, NJ
Sum 1996	Lead Teacher, Leadership Summer Mathematics Institute, Rutgers University, New Brunswick, NJ
Sum 1994	Lead Teacher, Young Scholars Summer Program, Arizona State University
Sum 1991 – 1996	Lead Teacher, Young Scholars Summer Program, Rutgers University, New Brunswick, NJ

Visiting Positions

Spring 2024	Federal University of Rio de Janeiro, Rio de Janeiro, Brazil
Fall 2023	Alfréd Rényi Institute of Mathematics, Hungarian Academy of Sciences, Budapest, Hungary
Fall 2023	Department of Mathematics and Statistics, University of Regina, Regina, Canada
Sum 2018	Institute for Defense Analyses, La Jolla, CA
Sum 2013	Department of Mathematics, National University of San Luis, San Luis, Argentina
Fall 2011	Department of Mathematics, National University of La Plata, La Plata, Argentina
Sum 2011	Institute for Defense Analyses, La Jolla, CA
Fall 2010	Department of Mathematics, and Centre de Recerca Matemática, Autonomous University of Barcelona, Barcelona, Spain
Sum 1997	Institute for Defense Analyses, Princeton, NJ
Spr 1997	Department of Applied Mathematics and Statistics, The Johns Hopkins University, Baltimore, MD
Win 1997	Department of Mathematics, Dartmouth College, Hanover, NH
Fall 1996	Department of Mathematics, Vanderbilt University, Nashville, TN

Consulting

Jan 2003	Prescott Unified School Disctrict, Prescott, AZ
Sum 2000	CIGNA Medical Group, Phoenix, AZ
Sum 2024	Intercollegiate Tennis Association, Gilbert, AZ

Fellowships

Fall 1989 – Spr 1990	National Needs Fellow, Department of Mathematics, Rutgers University, New Brunswick, NJ

Teaching Assistantships

Fall 1988 – Spr 1989	Department of Mathematics, Rutgers University, New Brunswick, NJ
Fall 1985 – Spr 1988	Department of Mathematics, State University of New York, Stony Brook, NY

GRANTS AND AWARDS

External Research

Jan 2017 – Dec 2017   University of Malta
         Collaborative Research on Active Problems in the
         Mathematical Area of Extremal Set Theory
         co-PI (with P. Borg and V. Kamat), $2,240

Sep 2012 – Aug 2018   Simons Foundation
         Graph Pebbling, Extremal Set Theory, and Universal Cycles
         Sole PI, $35,000

Sep 2011 – Dec 2011   J. William Fulbright Scholarship
         Combinatorial Optimization
         Sole PI, $13,950

May 2004 – May 2006   National Security Agency
         Pebbling in Graphs
         Sole PI, $51,135

Dec 2004   Banff International Research Station
         Generalizations of de Bruijn Cycles and Gray Codes
         Workshop lodging and subsistence stipend

Mar 2002 – Mar 2004   National Security Agency
         Pebbling in Graphs
         Sole PI, $49,025

Jun 1992 – Nov 1994   National Science Foundation
         Universal cycles and partially ordered sets
         Sole PI, $41,326

External Education

May 2012 – Apr 2013   Mathematical Association of America
         Dolciani Mathematics Enrichment Grant
         ASU Summer Mathematics Institute
         Sole PI, $6,000

Jun 2005 – May 2009   National Science Foundation
         Project Pathways: Opening Routes to Math and Science
         Success for all Students
         Co-PI, Marilyn Carlson et al., $12,323,993

Jan 2004 – Dec 2009   National Science Foundation
         Developing a Professional Learning Community Model
         for Secondary Precalculus Teachers: A Model for
         Teacher Professional Growth
         Co-PI, Marilyn Carlson et al., $4,939,497

Nov 2007 – Oct 2008   National Science Foundation
         Southwest Undergraduate Mathematics Research Conference V
         Sole PI, $3,000

Jun 2008	Mathematical Association of America (PREP)
	Linear Optimization for Undergraduate Mathematics Majors
	Sole PI, $28,500
Jun 2005 – May 2008	National Science Foundation (CCLI-EMD track)
	Linear Optimization: The Simplex Workbook (Textbook)
	Sole PI, $75,000
Jun 2003 – May 2004	National Science Foundation
	Arizona Mathematics Undergraduate Conference I
	Sole PI, $3,000
Aug 2001 – Feb 2003	Motorola Great Communities Seed Money Grant
	Summer Teachers Institute in Mathematics
	Co-PI, H.K. Kierstead, $8,000
Jun 2001 – May 2002	Eisenhower Foundation
	Summer Teachers Institute in Mathematics
	Co-PI, H.K. Kierstead, $50,000

Internal Research

Spr 2020 – Fall 2020	VCU, Undergraduate Research Opportunities Program, $2,000
Fall 2006 – Fall 2007	Fulton School of Engineering, Undergraduate Research Initiative, $2,000
Spr 2004 – Fall 2004	Jack H. Hawes Memorial Research Scholarship, $1,000
Spr 2002	ASU, Investigator Incentive Award, $391
Spr 2001	College of Liberal Arts and Sciences, Travel Grant, $872
Spr 1998	College of Liberal Arts and Sciences, Mini Grant, $1,000
Sum 1995	College of Liberal Arts and Sciences, International Travel Grant, $1,000

Internal Education

Jun 2012 – May 2013	Southwestern Undergraduate Mathematics Research Conference X
	Sole PI, School of Mathematical and Statistical Sciences, $5,500
May 2012 – Apr 2013	ASU Summer Mathematics Institute
	Sole PI, School of Mathematical and Statistical Sciences, $26,416
Jun 2011 – May 2012	Southwestern Undergraduate Mathematics Research Conference IX
	Sole PI, School of Mathematical and Statistical Sciences, $3,000
Jun 2010 – May 2011	Southwestern Undergraduate Mathematics Research Conference VIII
	Sole PI, School of Mathematical and Statistical Sciences, $2,500
Jun 2009 – May 2010	Southwestern Undergraduate Mathematics Research Conference VII
	Sole PI, School of Mathematical and Statistical Sciences, $2,500
Jun 2008 – May 2009	Southwestern Undergraduate Mathematics Research Conference VI
	Sole PI, Department of Mathematics and Statistics, $2,000
	Sole PI, College of Liberal Arts and Sciences, $2,000
Jun 2007 – May 2008	Southwestern Undergraduate Mathematics Research Conference V
	Sole PI, Office of the Vice President for Research, $2,000
	Sole PI, College of Liberal Arts and Sciences, $1,000
	Sole PI, Department of Mathematics and Statistics, $1,000
	Sole PI, SUMS Institute, $1,000
	Sole PI, CRESMET, $2,000
	Sole PI, Barrett Honors College, $1,000

Jun 2006 – May 2007	Arizona Mathematics Undergraduate Conference IV
	Sole PI, Department of Mathematics and Statistics, $1,000
	Sole PI, SUMS Institute, $1,000
Jun 2005 – May 2006	Arizona Mathematics Undergraduate Conference III
	Sole PI, Department of Mathematics and Statistics, $1,000
	Sole PI, SUMS Institute, $1,000
Jun 2004 – May 2005	Arizona Mathematics Undergraduate Conference II
	Sole PI, Department of Mathematics and Statistics, $1,000
	Sole PI, SUMS Institute, $1,000
Jun 2003 – May 2004	Arizona Mathematics Undergraduate Conference I
	Sole PI, Office of the Vice President for Research, $2,000
	Sole PI, College of Liberal Arts and Sciences, $1,000
	Sole PI, Department of Mathematics and Statistics, $1,000
	Sole PI, SUMS Institute, $1,000

Awards

Mar 2023	VCU College of Humanities and Sciences Distinguished Service nomination
Mar 2022	VCU President's Distinguished Service nomination
Apr 2012	President's Professorship from ASU
Feb 2012	2011 Texty Award from the Text and Academic Authors Association
Apr 2009	Charles Wexler Teaching Award from the School of Mathematical and Statistical Sciences (in addition to four prior nominations)
Apr 2008	Professor of the Year (Runner-Up) from the ASU Parents Association
Apr 2007	Distinguished Teaching Award from the Southwest Section of the Mathematical Association of America
Apr 2007	Faculty Achievement Award for Student Mentoring from ASU
Apr 2007	Last Lecture Series Speaker from Student Affairs/Campus Activities at Arizona State University
Dec 2003	Editor's Choice: Best Research Papers in Discrete Mathematics

Other Recognition

Jun 2017	*Through juggling and card tricks, VCU math chair reveals the hidden world of math to Richmond elementary, middle school students*, VCU News
Apr 2012	*Exemplary faculty named President's Professors*, ASU News
Mar 2011	*Students present research at math conference*, ASU News
Apr 2008	*Blasingame is 2008 Professor of the Year*, ASU News
Jan 2008	*Julia Robinson and Hilbert's Tenth Problem (Film credits)*, George Paul Csicsery, Producer/Director
Nov 2007	*Distinguished Teaching Award Winners*, Mathematical Association of America FOCUS
Apr 2007	*Last Lectures feature Berch, Hurlbert, Wolfthal*, ASU Insight
Apr 2007	*Faculty Achievement Awards*, ASU Foundation
Jan 2005	*NUMB3RS interview*, KPHO-TC News (CBS, Phoenix)
Apr 2004	*CRESMET awarded $4.5 million grant*, ASU Insight
Mar 2004	*First conference draws university math scholars*, ASU State Press
Feb 2004	*Math students sine on with ASU department*, Arizona Republic

TEACHING

Courses Taught   [* Designed]

Virginia Commonwealth University

MATH 211 Discrete Mathematics	F16
MATH 300 Introduction to Mathematical Reasoning	F19, S22, F22
MATH 310 Linear Algebra	S15, F24
MATH 350 Introductory Combinatorics	F18
MATH 356 Graphs and Algorithms	S23
MATH 556 Graph Theory	F15, F20, F22
MATH 756 Graph Pebbling*	F17, S25
MATH 756 Extremal Hypergraphs*	F21

Arizona State University

MAT 170 Pre-Calculus	F01
MAT 119 Finite Mathematics	F90, S91, Sm91, F91, S92, S93, Sm95, F99
MAT 242 Linear Algebra	S94
MAT 243 Discrete Mathematics	F92, F93, F95, F97, S98, F00, F08, F12
MAT 265 Calculus for Engineers I	S13
MAT 300 Mathematical Structures	F93, S95, F95, F98, F00, F02, F07, F09, S11–13
MAT 342 Linear Algebra	F94, S99, F06
MAT 394 Algorithmic Graph Theory*	F13
MAT 415 Combinatorics*	F92, F94, F97, F99, F05, F09, F12, F13
MAT 416 Graph Theory	S96, S01
MAT 419 Linear Optimization*	S91–96, S98–01, S03–04, S06–12
MAT 447 Cryptography*	F98, F01, F03, F06
MAT 494 Undergraduate Research*	F07
MAT 499 Graph Theory	S98
MAT 512 Combinatorics*	F05, F09, F12
MAT 518 Combinatorial Optimization*	S07
MAT 598 Cryptography*	F01, F03, F06
MAT 598 Random Graphs*	F91
MAT 598 Extremal Set Theory*	S00, S10

Vanderbilt University

MATH 222 Calculus III [Sophomore level]	F96

Dartmouth College

Math 28 Combinatorics [Senior level]   W97

The Johns Hopkins University

Math 770 Extremal Set Theory* [Graduate level]   S97

Autonomous University of Barcelona (MathMods, Erasmus Mundus Program)

Combinatorial Optimization* [Graduate level]   F10

National University of La Plata (Fulbright Program)

Combinatorial Optimization* [Graduate level]   F11

Student Research Supervision

Undergraduate Students

Spr 2025	Travis Pence (University of Wisconsin), *Working on pebbling and domination games and also Graham's conjecture.*
Fall 2023	Yunus Bidav, *Working on target pebbling in trees.*
Fall 2023	Eric Myzelev (University of Pennsylvania), *Working on pebbling and domination games and also Graham's conjecture.*
Fall 2023	Sean Fiscus (Duke University), *Working on pebbling and domination games and also Graham's conjecture.*
Fall 2020	Essak Seddiq, *Published results on graph pebbling.*
Fall 2013	Philip Monk, *Worked on bijections for spanning trees in graphs*
Fall 2013	Michael Byrne, *Studied intersection theorems for independent sets in trees.*
Spr 2012	Scott Alter and Alessandro Arcuri, *Worked on applications of linear optimization techniques to the study of graph pebbling.*
Spr 2008	Josh Wolfe, *Refined the web software* WebSim *that Jake Hawkes built.*
Fall 2007	Dawn Curtis, Taylor Hines, Tatiana Moyer and Howard Cheng, *Presented two posters at the Joint Meetings, January, 2008, San Diego. Research earned Taylor the Department of Mathematics and Statistics Award for Best Undergraduate Research. Two papers published in the professional journals Integers: The Electronic Journal of Combinatorial Number Theory, and Discrete Mathematics.*
Spr 2007	David Hayden, *Worked on CAPTCHA applications.*
Fall 2006	Camila Bushell, *Presented her work at the Nebraska Conference for Undergraduate Women in Mathematics.*
Spr 2006	Jake Hawkes, *Built the first version of my web software* WebSim *that I use for teaching linear optimization.*
Spr 2004	Ben Munyan, *Presented his work (as a Freshman) at the First Arizona Mathematics Undergraduate Conference, February 2004, Arizona State University, Tempe, AZ; results published in the professional journal Bulletin of the Institute of Combinatorics and its Applications.*

Spr 2004	Shawn Elledge, *Research earned him the Department of Mathematics and Statistics Jack H. Hawes Memorial Research Scholarship; presented his work at the First Arizona Mathematics Undergraduate Conference, February 2004, Arizona State University, Tempe, AZ; results published in the professional journal Integers: The Electronic J. of Combin. Number Theory.*
Fall 2003	Betsy Crull, Tammy Cundiff, Paul Feltman and Laura Pudwell (all of Valparaiso University, Valparaiso, IN), *Research published in the professional journal Discrete Mathematics.*
Fall 2002	Kevin Bayne
Spr 2001	Collin Raymond, *Received Department of Mathematics and Statistics Award for Best Undergraduate Research (as a Sophomore); presented his work at the Mathematics Association of America national conference MathFest, June 2001, Minneapolis, MN; was awarded a Barry M. Goldwater Scholarship in 2002; was recognized by USA Today as one of the top 20 undergraduates in the United States in 2003; received a Marshall Scholarship in 2003.*
Spr 1999	Gavin Hensing
Fall 1997	Brian Jew
Spr 1995	Manish Rao
Spr 1994	Andrew Arocho
Spr 1993	Josh Moya

Masters Students

Spr 2023	Paul Fay
Spr 2023	Maya Tennant
Spr 2022	Josh Forkin
Spr 2010	Kate Fisher
Sum 2007	Vikram Kamat, Louis DeBiasio
Spr 2007	Ben Hester
Fall 1996	Thomas Clarke
Spr 1994	Janice Goff, Attila Biber
Spr 1993	Nicholas Sekreta

Ph.D. Students

Spr 2028	James Danielsson (*expected*)
Spr 2028	Maya Tennant (*expected*)
Spr 2028	Paul Fay (*expected*)
Spr 2026	Viktoriya Bardenova (*expected*)
Spr 2025	Matheus Adauto (*Fed. Univ. Rio de Janeiro, co-advised w/ Celina Figueiredo*)
Fall 2012	Victoria (Horan) Goliber (*now at D-Wave*)
Spr 2011	Vikram Kamat (*now an Assistant Professor at Villanova University, PA*)
Fall 2010	Andrew Jennings (*now an independent consultant*)
Spr 2010	Ben Hester (*now working for the Federal Government*)
Sum 2002	Airat Bekmetjev (*now an Associate Professor at Hope College, MI*)

Graduate Thesis Committees

Masters

Fall 2007	Sarah Neerings, Jamie Vergari
Spr 2006	Weicheng Xuan
Fall 2002	Rekha Narasimhan
Spr 1999	Taojie Chen
Spr 1998	Mark Neeley
Spr 1997	Pam Zimmerman

Ph.D.

Fall 2023	Victoria Bednar
Spr 2013	Sujogya Banerjee
Fall 2012	Matthew Smith
Sum 2011	Adam Bland, Louis Debiasio
Fall 2010	David Smith
Sum 2010	Jacob White
Spr 2010	Phong Chau, Chris Severs
Spr 2009	Stacey Bowling, Karin Saoub
Fall 2008	Ashwini Kelkar
Spr 2008	Apple Bloom
Spr 2007	Ted Coe
Spr 2004	Jessica Knapp, Shelly Smith
Fall 2003	Daqing Yang
Spr 2002	Chuck Dunn
Spr 1999	Xuerong Zhang
Spr 1998	Lirong Yan
Spr 1996	Yingxian Zhu
Fall 1995	Juan Quintana
Fall 1994	Katalin Kolossa
Spr 1992	Kent Cantwell

PROFESSIONAL SERVICE

University Service

Administration

2014 – 2021   Chair, Department of Mathematics and Applied Mathematics, VCU

- Directed a department of 51 faculty, 5 staff, over 50 Master's and Ph.D. students, and over 10,000 undergraduate student seats per year.
- Grew the department from 38 faculty and 3 staff to 51 faculty and 3 staff, and the number of majors from under 100 to over 200 students.
- Added a 5-year BS/MS program, and a concentration in Discrete Mathematics to the Ph.D. program, and expanded the Ph.D. program from 12 GTAs to 20 GTAs and 45 total students.
- Created the position of Director of Introductory Mathematics to oversee the coordination of courses at the first-semester Calculus level and below, which has grown from under 5,000 to over 6,700.
- Campaigned successfully to improve conditions for non-tenurable faculty, including the removal of automatic termination after 7 years, the raising of starting salaries from under $40,000 to over $50,000, the installation of a promotion track, and the integration of positions of responsibility within the department.
- Promoted 29 faculty: 7 to Professor, 7 to Associate Professor, 1 to Associate Professor of Teaching, and 14 to Assistant Professor of Teaching.
- Supported 4 faculty and 1 staff through the Grace E. Harris Leadership Institute, 6 faculty in Project NExT, 2 in Project STaR, and 4 in HHMI Inclusive Excellence Fellows & Leaders for Inclusive Learning.
- Developed additional research groups in Applied Mathematics, Logic/Set Theory, Geometry/Topology/Physics, and Mathematics Education, and expanded the number of weekly seminars from 3 to 5.
- Hosted 12 national and international conferences, including the annual Biology and Medicine through Mathematics, and 2 regional undergraduate research conferences, including the annual Richmond Area Mathematical Sciences, and have been awarded to host the 2024 Bridges conference.
- Grew department external grant PIs or co-PIs to include 19 of 26 tenure-track faculty, including 17 NSF, 10 Simons, 3 VDOE, and 2 NSA grants, among others, as well as 3 Fulbright Scholars.
- Built a strong undergraduate research program, including 8 Honors Summer Undergraduate Research Program awards, 7 Undergraduate Research Opportunities Program awards, 5 Research Experience for Undergraduates Program awards from the MAA, NSF, and NSA, and an annual summer Graph Brain Project, as well as supporting students annually to present their work at regional conferences.

- Wrote new Bylaws, Mission, and Vision Statements, and completed the department's first ever Academic Program Review.

- Began the process to offer a BA in addition to the BS degree, built the Grace St. Math Exchange (soon to enter the new Franklin St. STEM building), added ALEKS and POGIL instruction to Math 151, transitioned the department placement exam to ALEKS, and improved the department's 6-year graduation rate by 13%.

- Helped department faculty win 1 College Outstanding Staff Leadership award, 3 College Distinguished Teaching awards, 1 VCU Outstanding Undergraduate Research Faculty Mentor award, and established the new Reuban Farley Award for Teaching Innovation and Excellence.

- Became one of 24 (now 57) National Math Alliance institutional members, increased from 0 to 7 the number of department faculty who are Math Alliance mentors, sent students annually to the Field of Dreams conference and to the Nebraska Conference for Undergraduate Women in Mathematics, and increased minority enrollment in the major by 20%.

- Instituted Black History Month, Women's History Month, and National Mathematics Awareness Month events and activities, including bringing to campus such luminaries as Christine Darden (one of the NASA "computers" on whom the film *Hidden Figures* is based) and George Csicsery (director of numerous acclaimed films about famous mathematicians and mathematical programs).

- Expanded the department's community outreach to include Sonya Kovalevsky Day, Math Circle, Crazy Math Days, Morning Math, and the forthcoming Math Kangaroo competitions and Bridges Family Day.

- Introduced the four 1-credit courses MAT 191, 291, 391 and 491 (Freshman, Sophomore, Junior, and Senior Problem Seminars, in conjuction with building a Putnam Team).

2002 – 2004   Associate Chair, Department of Mathematics and Statistics, ASU

- Oversaw the entire undergraduate program (roughly 12,000 student seats per semestser), including the First Year Mathematics Program.

- Grew the number of majors from under 350 to over 450 students through various means of recruitment.

- Built a program in Cryptography for Mathematics majors.

- Added a BA degree to the BS degree and promoted the development of more 300-level courses to attract more students to the major and focus the BS degree more on graduate school development.

- Initiated the Summer Certification Institute in Secondary Mathematics, a two-summer program (supported by the College of Education, the College of Liberal Arts and Sciences, the Center for Research on Education in Science, Mathematics, Engineering and Technology (CRESMET), and the Department of Mathematics and Statistics) for Mathematics majors to obtain a dual degree in Education, in preparation for Arizona secondary mathematics teaching certification.

- Resurrected the Math Club and served as its advisor. The club was elected in 2004 to the Student Organization Resource Center Hall of Fame for their role in helping plan, organize and run the First Arizona Mathematics Undergraduate Conference.

- Introduced the four 1-credit courses MAT 194, 294, 394 and 494 (Freshman Problem Seminar, Sophomore Problem Seminar, Junior Problem Seminar and Senior Problem Seminar in conjuction with growing the Putnam Team, which now has over 20 students (one of whom scored in the top 5% in North America in 2003).

Department Committees

2022 – Present	Executive Committee (Elected)
2024 – Present	PhD Steering Committee
2024 – Present	Faculty Promotion Committee Chair
2024 – Present	Classroom Visitation Committee
2020 – 2024	Bridges Conference Committee Co-Chair
2016 – 2023	Math Exchange Committee Chair
2020 – 2022	Academic Program Review Committee Chair
2014 – 2021	Executive Committee Chair (ex-officio)
2018 – 2020	Bridges Conference Committee Chair
2013 – 2014	Personnel Committee Chair (Elected)
2012 – 2013	Personnel Committee (Elected)
2003 – 2014	Discrete Mathematics Graduate Qualifying Exam Committee
1992 – 2014	Discrete Mathematics Graduate Comprehensive Exam Committee
2012 – 2013	Review Committee (Elected)
2011 – 2012	Awards Committee
2006 – 2012	Faculty Mentor (Yan Yang)
2009 – 2010	Graduate Committee
2007 – 2009	Personnel and Budget Committee (Elected)
2005 – 2007	Colloquium and Mathematics Awareness Committee (Chair)
2007	Computing Facilities Committee
2005 – 2007	Review Committee (Elected)
2002	Personnel and Budget Committee (Elected)
	Resigned to accept position as Associate Chair
1998 – 2001	Colloquium Committee (Chair)
	Instituted National Mathematics Awareness Month at ASU
1998	Linear Algebra Course Committee (Chair)
1997 – 1998	Undergraduate Advisory Committee
1997 – 1998	Education Liason Committee
1995	Discrete Mathematics Course Committee (Chair)
1992 – 1994	Undergraduate Advisory Committee

2024 – Present	Faculty Senate
2014 – Present	Recruitment Inclusive Champion
2009 – 2010	College of Liberal Arts and Sciences Grievance Committee
2002 – 2004	Statewide Articulation Task Force
2002 – 2004	General Studies Council, Mathematics Subcommittee (Chair)
2002 – 2004	General Studies Council
2000	Academic Standards Committee
1995	Ph.D. Defense Committee, Graduate College Representative *David Marcus, Physics*
1993	Ph.D. Defense Committee, Graduate College Representative *Carlos Castro, Electrical Engineering*

Other Service

2003	Campus Match, College of Liberal Arts and Sciences
2002 – 2004	Mathematics Exhibit Organizer, SEE ASU
1994 – 2014	Faculty Ambassador, College of Liberal Arts and Sciences

External Service

Offices

2000 – 2002	Program Director (Elected) Society for Industrial and Applied Mathematics Discrete Mathematics Activity Group

Committees

2004 – 2014	Advisory Council, Desert Garden Montessori School *Grew a preK-6 school to a preK-12 school*
2000 – 2001	Arizona Mathematics Education Panel of Experts *Made recommendation to ABOR against high-stakes testing*
1996 – 1998	Steering Committee, Center for Discrete Mathematics and Theoretical Computer Science, Research and Education Institute

Underrepresented Student Mentoring

2017 – Present	Math Alliance F-GAP Program
2023 – Present	Southern African Mathematical Sciences Assocation & Masamu Program

Editorial Service

Editorial Board, Involve — A Journal of Mathematics, Mathematical Sciences Publishers, 2011 – Present.

Editorial Board, Open Journal of Discrete Mathematics, Scientific Research Publishing, 2011 – Present.

Editorial Board, Journal of Discrete Mathematics, Hindawi Publishing, 2012 – 2016.

Co-Editor, Discrete Mathematics, Special Issue, Proceedings of the Banff International Research Station Workshop on Generalizations of de Bruijn Cycles and Gray Codes, 2004 – 2009.

Editorial Board, Center for Discrete Mathematics and Theoretical Computer Science, Modules Series, 1997 – 2011.
Editor, Society for Industrial and Applied Mathematics, Discrete Mathematics Electronic Newsletter, 1997 – 1999.

Journal Referee

American Mathematical Society, Contemporary Mathematics
American Mathematical Society, Mathematical Reviews
Ars Combinatoria
Australasian Journal of Combinatorics
Combinatorica
Discrete Mathematics
Discussiones Mathematicae Graph Theory
Electronic Journal of Combinatorics
European Journal of Combinatorics
Graphs and Combinatorics
ICM-SIAM Symposium on Discrete Algorithms
International Journal of Computer Mathematics
Involve
Journal of Combinatorial Designs
Journal of Combinatorial Mathematics and Combinatorial Computing
Journal of Combinatorial Optimization
Journal of Combinatorial Theory, Series A
Journal of Combinatorial Theory, Series B
Journal of Graph Theory
Journal of the Korea Society of Mathematical Education, Series B
Latin-American Algorithms, Graphs, and Optimization Symposium
Mathematical Association of America, American Mathematical Monthly
Order
Rocky Mountain Journal of Mathematics
Society of Industrial and Applied Mathematics, Journal on Discrete Mathematics

Funding Agency Referee

National Science Foundation
National Security Agency

Professional Memberships

American Mathematical Society (AMS)
Center for Discrete Mathematics and Theoretical Computer Science (DIMACS)
Institute for Combinatorics and its Applications (ICA)
Institute for Operations Research and Management Science (INFORMS)
Mathematical Association of America (MAA)
MAA Project NExT (New Experiences in Teaching) Fellow
Society for Industrial and Applied Mathematics (& Activity Group in Discrete Math)
Textbook and Academic Authors Association (TAA)

Conference Organization

Organizing Committee, Bridges Conference, Virginia Commonwealth University, Richmond, VA, July, 2024.

Organizer, 21st SIAM Conference on Discrete Mathematics, Minisymposium on Graph Pebbling, Spokane, WA (online), June, 2021.

Organizer, 19th SIAM Conference on Discrete Mathematics, Minisymposium on Graph Pebbling, Denver, CO, June, 2018.

Organizer, IntersectionFest, the Workshop on Intersecting Set Systems, Virginia Commonwealth University, Richmond, VA, March, 2016.

Organizing Committee, Computers in Scientific Discovery 7, Virginia Commonwealth University, Richmond, VA, July, 2015.

Organizing Committee, Connections in Discrete Mathematics, a Celebration of the Work of Ron Graham, Simon Fraser University, Vancouver, Canada, June, 2015.

Organizer, PebbleFest, the Workshop on Graph Pebbling, Virginia Commonwealth University, Richmond, VA, March, 2015.

Organizing Committee, 11th Southwestern Undergraduate Mathematics Research Conference, Mesa Community College, Mesa, AZ, March, 2014.

Organizing Committee, 10th Southwestern Undergraduate Mathematics Research Conference, University of New Mexico, Albuquerque, NM, March, 2013.

Organizer, 16th SIAM Conference on Discrete Mathematics, Minisymposium on Graph Pebbling, Halifax, Canada, June, 2012.

Organizing Committee, 9th Southwestern Undergraduate Mathematics Research Conference, University of Arizona, Tucson, AZ, March, 2012.

Organizing Committee, 8th Southwestern Undergraduate Mathematics Research Conference, Northern Arizona University, Flagstaff, AZ, March, 2011.

Organizer & Presenter, Joint Math Meetings (117th AMS, 94th MAA), Minicourse on Linear Optimization, New Orleans, LA, January, 2011.

Organizing Committee, 7th Southwestern Undergraduate Mathematics Research Conference, University of Texas, El Paso, TX, March, 2010.

Organizer, 2nd SIAM Canadian Discrete and Algorithmic Mathematics Conference, Minisymposium on Graph Pebbling, Montreal, Canada, May, 2009.

Organizing Committee, 6th Southwestern Undergraduate Mathematics Research Conference, University of New Mexico, Albuquerque, NM, February, 2009.

Program Committee, Jubilee Conference on Discrete Mathematics, Centre for Mathematical Sciences, Banasthali University, Banasthali Vidyapith, Rajasthan, India, January, 2009.

Organizer & Presenter, Mathematics Association of America PREP Workshop on Linear Optimization, Washington, DC, June, 2008.

Conference Director, 5th Southwestern Undergraduate Mathematics Research Conference, Arizona State University, Tempe, AZ, February, 2008.

Organizing Committee, 4th Arizona Mathematics Undergraduate Conference, Western New Mexico University, Silver City, NM, April, 2007.

Organizing Committee, 3rd Arizona Mathematics Undergraduate Conference, Northern Arizona University, Flagstaff, AZ, October, 2005.

Organizing Committee, 2nd Arizona Mathematics Undergraduate Conference, University of Arizona, Tucson, AZ, November, 2004.

Organizer, 12th SIAM Conference on Discrete Mathematics, Minisymposium on Graph Pebbling, Nashville, TN, June, 2004.

Conference Director, 1st Arizona Mathematics Undergraduate Conference, Arizona State University, Tempe, AZ, February, 2004.

Organizing Committee, 13th International Conference on Formal Power Series and Algebraic Combinatorics, Arizona State University, Tempe, AZ, May, 2001.

Co-Director, Center for Discrete Mathematics and Theoretical Computer Science, Research and Education Institute, Rutgers University, New Brunswick, NJ, July – August, 1997.

REFEREED PUBLICATIONS

Appeared

1. *A short proof that N^3 is not a circle containment order*, Order **5** (1988), no. 3, 235–237.

2. (with G. Isaak) *On the De Bruijn torus problem*, J. Combin. Theory Ser. A **64** (1993), no. 1, 50–62. MR 1239511

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PRESENTATIONS

Plenary

1. *Important techniques in graph pebbling*, International Conference on Applications of Mathematics in Data Science, St. Xavier's College, Palyamkottai, Tamil Nadu, India, February, 2024.

2. *Cops and robbers pebbling*, International Workshop on Variants of Graph Domination, Bharata Mala College, Thrikkakara, Kerala, India, November, 2022.

3. *The strong target pebbling conjecture*, Mathematics Conference, St. Xavier's College, Palyamkottai, Tamil Nadu, India, July, 2022.

4. *Graph pebbling thresholds*, Mathematics Conference, St. Xavier's College, Palyamkottai, Tamil Nadu, India, July, 2022.

5. *On the Holroyd-Talbot conjecture for sparse graphs*, Mathematics Conference, St. Xavier's College, Palyamkottai, Tamil Nadu, India, July, 2022.

6. *Graph pebbling thresholds*, International Seminar on New Advances in Graph Theory, Madurai Kamaraj University, Madurai, Tamil Nadu, India, July, 2022.

7. *Graph pebbling III: Thresholds and multiset shadows*, Workshop on Combinatorial Methods in Graph Theory, Amrita Vishwa Vidyapeetham University, Coimbatore, Tamil Nadu, India, July, 2022.

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10. *On EKR graphs*, Networked Life: Celebration the Life and Career of Fan Chung and Ron Graham, University of California, San Diego, CA, January, 2016.

11. *Graph pebbling: Paradigms & problems*, CombinaTexas, Texas A&M University, College Station, TX, April, 2014.

12. *Graph pebbling: Thresholds*, Centre International de Mathématiques Pures et Appliquées, Escuela de Combinatoria del Sur, 2nd Puntana School of Combinatorics, National University of San Luis, San Luis, Argentina, July, 2013.

13. *Graph pebbling: Complexity*, Centre International de Mathématiques Pures et Appliquées, Escuela de Combinatoria del Sur, 2nd Puntana School of Combinatorics, National University of San Luis, San Luis, Argentina, July, 2013.

14. *Graph pebbling: Class 0*, Centre International de Mathématiques Pures et Appliquées, Escuela de Combinatoria del Sur, 2nd Puntana School of Combinatorics, National University of San Luis, San Luis, Argentina, July, 2013.

15. *Graph pebbling: Weight functions*, Centre International de Mathématiques Pures et Appliquées, Escuela de Combinatoria del Sur, 2nd Puntana School of Combinatorics, National University of San Luis, San Luis, Argentina, July, 2013.

16. *Graph pebbling II*, 43rd Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University, Boca Raton, FL, March, 2012.

17. *Graph pebbling I*, 43rd Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University, Boca Raton, FL, March, 2012.

18. *Linear optimization methods for graph pebbling*, Conference on Numerical Optimization and Applications in Engineering, Centre de Recerca Matemática, Autonomous University of Barcelona, Barcelona, Spain, October, 2010.

19. *General graph pebbling*, Jubilee Conference on Discrete Mathematics Proceedings, Banasthali University, Banasthali Vidyapith, Rajasthan, India, January, 2009.

20. *Facilitating inquiry-based learning classroom issues with technology*, 11th Annual Legacy of R.L. Moore Conference, Austin, TX, July, 2008.

21. *Magimatics*, Honors Week Speaker, Department of Mathematics and Statistics, Northern Arizona University, Flagstaff, AZ, April, 2008.

22. *Veni, vidi, pebblici*, 4th Annual Arizona Mathematics Undergraduate Conference, Western New Mexico University, Silver City, NM, April, 2007.

23. *Everything you wanted to know about graph pebbling but were afraid to ask*, Graph Theory Day 50 (sponsored by the New York Academy of Sciences), Dowling College, Oakdale, NY, May, 2005.

24. *Mathemagical card tricks*, 2nd Big Sky Mini-Conference on Computer Science, Discrete Mathematics and Optimization, University of Montana, Missoula, MT, September, 1996.

Invited

25. *Recent results on the Holroyd-Talbot Conjecture*, Summit:280, Eötvös Loránd University, Budapest, Hungary, July, 2024.

26. *Recent results on the Holroyd-Talbot Conjecture*, Canadian Mathematical Society Summer Meeting, University of Saskatchewan, Saskatoon, Canada, June, 2024.

27. *Progress in graph pebbling: optimal grid density, Graham's conjecture, and the domination game*, Masamu Advanced Study Institute and Workshop, Pretoria, South Africa, November, 2023.

28. *The target pebbling conjecture*, Southern Africa Mathematical Sciences Association Annual Conference, University of Pretoria, Pretoria, South Africa, November, 2023.

29. *Graph pebbling problems and conjectures*, 20th SIAM Conference on Discrete Mathematics, Minisymposium on Graph Pebbling, Spokane, WA (online), June, 2021.

30. *Pebbling in chordal graphs*, 50th Southeastern International Conference on Combinatorics, Graph Theory and Computing, Special Section on Structured Families of Graphs and Orders, Florida Atlantic University, Boca Raton, FL, March, 2019.

31. *Pebbling in semi-2-trees*, 8th Latin-American Workshop on Cliques in Graphs, Rio de Janeiro, Brazil, August, 2018.

32. *Pebbling in semi-2-trees*, 19th SIAM Conference on Discrete Mathematics, Minisymposium on Graph Pebbling, University of Colorado, Denver, CO, June, 2018.

33. *Algorithmic aspects of graph pebbling*, Joint Math Meetings, AMS Special Session on Computational Combinatorics and Number Theory, San Diego, CA, January, 2018.

34. *Pebbling in chordal graphs*, 2nd Malta Conference in Graph Theory and Combinatorics, Qawra, Malta, June, 2017.

35. *The Composer*, Gathering for Gardner 12, Atlanta, GA, March, 2016.

36. *Storming the Castle*, Gathering for Gardner 12, Atlanta, GA, March, 2016.

37. *EKR on Trees*, IntersectionFest, the Workshop on Intersecting Set Systems, Virginia Commonwealth University, March, 2016.

38. *Graham's Pebbling Conjecture* 1116th Meeting of the American Mathematical Society, Special Session on Product Graphs, Seattle, WA, January, 2016.

39. *PebbleFest Problems*, PebbleFest, the Workshop on Graph Pebbling, Virginia Commonwealth University, March, 2015.

40. *Pebbling in split graphs*, 1105th Meeting of the American Mathematical Society, Special Session on Recent Developments in Graph Theory and Hypergraph Theory, Greensboro, NC, November, 2014.

41. *Overlap Cycles for Steiner Systems*, 1096th Meeting of the American Mathematical Society, Special Session on de Bruijn Sequences and their Generalizations, Baltimore, MD, January, 2014.

42. *EKR on Graphs and Lattices*, 1096th Meeting of the American Mathematical Society, Special Session on Structural and Extremal Graph Theory, Baltimore, MD, January, 2014.

43. *Erdős-Ko-Rado on graphs and lattices*, 1089th Meeting of the American Mathematical Society, Special Session on Extremal Graph Theory, University of Colorado, Boulder, CO, April, 2013.

44. *Graph pebbling: past, present, future*, 16th SIAM Conference on Discrete Mathematics, Minisymposium on Graph Pebbling, Dalhousie University, Halifax, Canada, June, 2012.

45. *Erdős-Ko-Rado on graphs and lattices*, Summer Meeting of the Canadian Mathematical Society, Session on Combinatorics, Regina, Canada, June 2012.

46. *Linear optimization methods for graph pebbling*, Reunión Anual de la Unión Matemática Argentina, Session on Graphic Models, San Miguel de Tucumán, Argentina, September, 2011.

47. *Graph pebbling*, 7th International Congress on Industrial and Applied Mathematics, Session on Discrete Dynamical Systems, Vancouver, Canada, July, 2011.

48. *Discovering linear optimization with simplex*, Annual Meeting of the Institute for Operations Research and Management Sciences, Session on Project-based and Discovery Methods for Teaching OR, Austin, TX, November, 2010.

49. *One mathematician's approach to linear optimization*, Annual Meeting of the Institute for Operations Research and Management Sciences, Session on The First OR Course, Austin, TX, November, 2010.

50. *An application of graph pebbling to zero-sum sequences in abelian groups*, 2nd SIAM Canadian Discrete and Algorithmic Mathematics Conference, Minisymposium on Graph Pebbling, Montreal, Canada, May, 2009.

51. *Universal cycles and magic*, Jubilee Conference on Discrete Mathematics Proceedings, Banasthali University, Banasthali Vidyapith, Rajasthan, India, January, 2009.

52. *Near ucycles for subsets exist*, 14th SIAM Conference on Discrete Mathematics, University of Vermont, Burlington, VT, June, 2008.

53. *On shadows in posets*, 1039th Meeting of the American Mathematical Society, Special Session on Combinatorics of Partially Ordered Sets, Claremont College, Claremont, CA, May, 2008.

54. *Graph pebbling*, Mathematical Association of America MathFest, Session on Graph Theory Ideas for Undergraduate Research, Knoxville, TN, August, 2006.

55. *Summer Certification Institute in Secondary Mathematics*, Annual Meeting of the Southwestern Section of the Mathematics Association of America, University of Arizona, Tucson, AZ, April, 2006.

56. *An application of graph pebbling to zero-sum sequences in abelian groups*, Joint Math Meetings (112th AMS, 89th MAA), AMS Special Session on Group Theory, San Antonio, TX, January, 2006.

57. *An application of graph pebbling to zero-sum sequences in abelian groups*, Integers Conference 2005, University of West Georgia, Carrollton, GA, October, 2005.

58. *Subset near ucycles*, Workshop on Generalizations of de Bruijn Cycles and Gray Codes, Banff International Research Station, Banff, Canada, December, 2004.

59. *New variations on the theme of graph pebbling: cover pebbling and fractional pebbling*, 6th International Joint Meeting of the American Mathematical Society and the Sociedad Matemática Mexicana, Special Session on Graph Theory and Combinatorics, Houston, TX, May, 2004.

60. *The pebbling threshold of squared cliques*, 989th Meeting of the American Mathematical Society, Special Session on Graphs and Digraphs, University of Colorado, Boulder, CO, October, 2003.

61. *The present picture of pebbling*, 965th Meeting of the American Mathematical Society, Special Session on Graphs and Digraphs, University of Nevada, Las Vegas, NV, April, 2001.

62. *New extensions and applications of the Clements-Lindström theorem*, DIMACS Research and Education Institute, Rutgers University, New Brunswick, NJ, August, 1999.

63. *Pebbling in graphs*, 24th Combinatorists of New England Conference, Smith College, Northhampton, MA, April, 1997.

64. *On dimension in the cube*, 872nd Meeting of the American Mathematical Society, Special Session on Partially Ordered Sets, University of Alabama, Tuscaloosa, AL, March, 1992.

Contributed

65. *Pinwheels of Alhambra*, Bridges Conference, Virginia Commonwealth University, Richmond, VA, July, 2024.

66. *On intersecting families of independent sets in trees*, 28th British Combinatorial Conference, Durham University, Durham, UK (online), July 2021.

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68. *The target pebbling conjecture*, 52th Southeastern International Conference on Combinatorics, Graph Theory and Computing, Florida Atlantic University, Boca Raton, FL, March, 2021.

69. *Cops and robbers pebbling*, Ljubljana Conference on Graph Domination, University of Ljubljana, Ljubljana, Slovenia, June 2020. *[Cancelled due to COVID-19]*

70. *Pebbling in powers of paths*, 32nd Cumberland Conference on Combinatorics, Graph Theory, and Computing, College of William and Mary, Williamsburg, VA, May 2020. *[Cancelled due to COVID-19]*

71. *On computing graph pebbling numbers*, 25th British Combinatorial Conference, University of Warwick, Warwick, UK, July 2015.

72. *Polynomial pebbling*, Connections in Discrete Mathematics, a Celebration of the Work of Ron Graham, Simon Fraser University, Vancouver, Canada, June, 2015.

73. *Pebbling in 2-paths*, 8th Latin-American Algorithms, Graphs, and Optimization Symposium, Praia das Fontes, Brazil, May, 2015.

74. *Graph pebbling: new results and open problems*, 36th Australasian Conference on Combinatorial Mathematics and Combinatorial Computing, University of New South Wales, Sydney, Australia, December, 2012.

75. *On Erdős-Ko-Rado graphs*, WaterMellon Workshop on Extremal Graph Theory, University of Waterloo, Waterloo, Canada, May, 2009.

76. *Facilitating inquiry-based learning classroom issues with technology*, Mathematical Association of America MathFest, Madison, WI, August, 2008.

77. *Discovering Linear Optimization*, 10th Annual Legacy of R.L. Moore Conference, Austin, TX, April, 2007.

78. *Linear Optimization: the Simplex Workbook*, Joint Math Meetings (113th AMS, 90th MAA), New Orleans, LA, January, 2007.

79. *Linear Optimization: the Simplex Workbook*, Mathematical Association of America MathFest, Knoxville, TN, August, 2006.

80. *Summer Certification Institute in Secondary Mathematics*, Mathematical Association of America MathFest, Session on Current Issues in Mathematical Education, Knoxville, TN, August, 2006.

81. *An application of graph pebbling to zero-sum sequences in abelian groups*, The China-Japan Joint Conference on Discrete Geometry, Combinatorics and Graph Theory, Center for Combinatorics, Nankai University, Tianjin, China; Department of Applied Mathematics, Northwestern Polytechnical University, Xi'an, China, November, 2005.

82. *A linear optimization proof of the KKM lemma*, Mathematics Association of America PREP Workshop on Geometric Combinatorics, Mathematical Sciences Research Institute, Berkeley, CA, June, 2005.

83. *A bijective proof of Catalan numbers*, Mathematics Association of America PREP Workshop on Geometric Combinatorics, Mathematical Sciences Research Institute, Berkeley, CA, June, 2005.

84. *Open problems in graph pebbling*, 12th SIAM Conference on Discrete Mathematics, Nashville, TN, June, 2004.

85. *The pebbling threshold of squared cliques*, International Workshop on Extremal Graph Theory, Budapest and Csopak, Hungary, June, 2003.

86. *On the pebbling threshold spectrum*, 11th SIAM Conference on Discrete Mathematics, San Diego, CA, August, 2002.

87. *Graph pebbling and the multiset lattice*, Joint Math Meetings (108th AMS, 85th MAA), San Diego, CA, January, 2002.

88. *On the pebbling threshold spectrum*, Euroconference on Combinatorics, Graph Theory and Applications, Barcelona, Spain, September, 2001.

89. *Thresholds for families of multisets, with applications to graph pebbling*, 10th SIAM Conference on Discrete Mathematics, Minneapolis, MN, June, 2000.

90. *On pebbling thresholds for graph sequences*, 17th British Combinatorial Conference, University of Kent, Canterbury, England, July, 1999.

91. *A note on graph pebbling*, 30th Southeastern International Conference on Combinatorics, Graph Theory and Computing, Florida Atlantic University, Boca Raton, FL, March, 1999.

92. *Graph pebbling, threshold functions, and the LYM inequality*, 9th SIAM Conference on Discrete Mathematics, University of Toronto, Toronto, Canada, July, 1998.

93. *Graph pebbling, threshold functions, and the LYM inequality*, 29th Southeastern International Conference on Combinatorics, Graph Theory and Computing, Florida Atlantic University, Boca Raton, FL, March, 1998.

94. *Graph pebbling problems*, Hudson River Undergraduate Mathematics Conference, Williams College, Williamstown, MA, April, 1997.

95. *Pebbling in diameter two graphs and products of paths*, 28th Southeastern International Conference on Combinatorics, Graph Theory and Computing, Florida Atlantic University, Boca Raton, FL, March, 1997.

96. *On the existence of De Bruijn tori with two by two windows*, 27th Southeastern International Conference on Combinatorics, Graph Theory and Computing, Louisianna State University, Baton Rouge, LA, February, 1996.

97. *On perfect factors and De Bruijn tori*, 15$^\text{th}$ British Combinatorial Conference, University of Stirling, Stirling, Scotland, July, 1995.

98. *The linear complexity of periodic sequences and the existence of perfect factors*, 26$^\text{th}$ Southeastern International Conference on Combinatorics, Graph Theory and Computing, Florida Atlantic University, Boca Raton, FL, March, 1995.

99. *On the dimension of $P_n(2, r)$ for large r*, 7$^\text{th}$ SIAM Conference on Discrete Mathematics, Albuquerque, NM, June, 1994.

100. *New constructions for De Bruijn tori, II*, 25$^\text{th}$ Southeastern International Conference on Combinatorics, Graph Theory and Computing, Florida Atlantic University, Boca Raton, FL, March, 1994.

101. *On extremal extensions in the cube*, International Conference on Combinatorics, Keszthely, Hungary, July, 1993.

102. *New constructions for De Bruijn tori*, 24$^\text{th}$ Southeastern International Conference on Combinatorics, Graph Theory and Computing, Florida Atlantic University, Boca Raton, FL, February, 1993.

103. *On the De Bruijn torus problem*, 6$^\text{th}$ SIAM Conference on Discrete Mathematics, University of Britich Columbia, Vancouver, Canada, June, 1992.

104. *Prüfer codes in graphs*, 7$^\text{th}$ International Conference on Graph Theory, Algorithms and Applications, Western Michigan University, Kalamazoo, MI, June, 1992.

105. *On the dimension of the antipodal layers*, 22$^\text{nd}$ Southeastern International Conference on Combinatorics, Graph Theory and Computing, Louisianna State University, Baton Rouge, LA, February, 1991.

106. *Ucycles for partitions and k-partitions*, International Conference on Sets, Graphs and Numbers, Budapest, Hungary, January, 1991.

107. *On universal cycles*, Advanced Research Institute for Discrete and Applied Mathematics V, Rutgers University, New Brunswick, NJ, June, 1990.

108. *Universal cycles: what works, what doesn't*, 21$^\text{st}$ Southeastern International Conference on Combinatorics, Graph Theory and Computing, Florida Atlantic University, Boca Raton, FL, February, 1990.

109. *The antipodal layers problem*, Advanced Research Institute for Discrete and Applied Mathematics IV, Rutgers University, New Brunswick, NJ, June, 1989.

Colloquia

110. *Graph pebbling problems and paradigms*, Department of Mathematics and Statistics, University of Regina, Regina, Canada, October, 2023.

111. *On Erdős-Ko-Rado graphs and the search for a conjecture*, Department of Mathematics and Statistics, Northern Arizona University, Flagstaff, AZ, March, 2021.

112. *Pebbling in powers of paths*, Department of Mathematics, Villanova University, Villanova, PA, March, 2021.

113. *Pebbling in powers of paths*, Department of Mathematics, Villanova University, Villanova, PA, April, 2020. *[Cancelled due to COVID-19]*

114. *Pebbling in powers of paths*, Department of Mathematics, United States Naval Academy, Annapolis, MD, February, 2020.

115. *Pebbling on chordal graphs*, Department of Mathematics and Statistics, Georgia State University, Atlanta, GA, March, 2019.

116. *The Erdős-Ko-Rado theorem: generalizations and a new proof*, Department of Mathematics, University of Malta, Qawra, Malta, June, 2017.

117. *Graph pebbling*, Department of Mathematics, Virginia Commonwealth University, Richmond, VA, February, 2014.

118. *A Walk in my woods: From Erdős to Erdős*, Department of Mathematics, Virginia Commonwealth University, Richmond, VA, March, 2013.

119. *Linear optimization methods for graph pebbling*, Department of Mathematics, George Mason University, Fairfax, VA, October, 2012.

120. *Linear optimization methods for graph pebbling*, Department of Mathematics, Virginia Commonwealth University, Richmond, VA, October, 2012.

121. *Linear optimization methods for graph pebbling*, Departamento de Matematicas, Universidad Nacional de San Luis, San Luis, Argentina, November, 2011.

122. *Linear optimization methods for graph pebbling*, Departamento de Matematicas, Universidad Nacional de Rosario, Rosario, Argentina, November, 2011.

123. *Linear optimization methods for graph pebbling*, Department of Mathematics, Westchester University, Westchester, PA, April, 2009.

124. *Extremal Sets, Probability, and Graph Pebbling*, Department of Mathematics and Statistics, Northern Arizona University, Flagstaff, AZ, April, 2008.

125. *Extremal Sets, Probability, and Graph Pebbling*, Department of Mathematics, Fresno State University, Fresno, CA, April, 2008.

126. *Graph pebbling*, Department of Computer Science, East Carolina University, Greenville, NC, October, 2006.

127. *Graph pebbling, unabridged*, Department of Mathematics, Trinity University, San Antonio, TX, November, 2004.

128. *Graph pebbling methods for zero sum sequences*, Department of Mathematics, Trinity University, San Antonio, TX, November, 2004.

129. *Graph pebbling, unabridged*, Department of Mathematics, Claremont McKenna College, Claremont, CA, March, 2004.

130. *Magimatics*, Department of Mathematics and Computer Science, Wake Forest University, Winston-Salem, NC, October, 1999.

131. *A survey of graph pebbling*, Mathematical Research Group, Hewlett-Packard Laboratories, Bristol, England, July, 1999.

132. *Magimatics and cryptography*, Department of Mathematical Sciences, Middle Tennessee State University, Murfreesboro, TN, October, 1998.

133. *Magimatics*, Department of Mathematics and Computer Science, Dickinson College, Carlisle, PA, April, 1997.

134. *Pebbling in graphs*, Department of Mathematical Sciences, The Johns Hopkins University, Baltimore, MD, April, 1997.

135. *Pebbling in graphs*, Department of Mathematics, University of Delaware, Newark, DE, April, 1997.

136. *Encryption sequences, magic and pebbling*, Department of Mathematics, Dartmouth University, Hanover, NH, January, 1997.

137. *Recent results and techniques in the construction of perfect factors*, Department of Mathematics, Vanderbilt University, Nashville, TN, September, 1996.

138. *Pebbling in graphs*, Department of Mathematics, Vanderbilt University, Nashville, TN, September, 1996.

139. *Recent results and techniques in the construction of perfect factors*, Department of Mathematics, University of Montana, Missoula, MT, September, 1996.

140. *Applications of extremal sets, probability and coloring to poset dimension*, Department of Mathematics, Royal Holloway University of London, London, England, July, 1995.

141. *Recent results and techniques in the construction of perfect factors*, Mathematics Department, National Security Agency, Fort George Meade, MD, May, 1995.

142. *Recent results and techniques in the construction of perfect factors*, Center for Computing Research, Institute for Defense Analyses, La Jolla, CA, May, 1995.

143. *Applications of extremal sets, probability and coloring to poset dimension*, Department of Mathematics, University of Connecticut, Storrs, CT, March, 1995.

144. *Applications of extremal sets, probability and coloring to poset dimension*, Department of Mathematics, University of Montana, Missoula, MT, February, 1995.

145. *Applications of extremal sets, probability and coloring to poset dimension*, Department of Mathematics and Computer Science, Wake Forest University, Winston-Salem, NC, September, 1994.

146. *Applications of extremal sets, probability and coloring to poset dimension*, Department of Mathematics, Lehigh University, Bethlehem, PA, March, 1994.

147. *Spanning trees in certain graphs*, Department of Computer Science, University of California, Santa Barbara, CA, February, 1993.

148. *On interval containment orders and dimension*, Mathematics Department, Los Alamos National Laboratories, Los Alamos, NM, August, 1992.

149. *Permutation ucycles*, Department of Mathematics, Dartmouth College, Hanover, NH, May, 1991.

150. *De Bruijn sequences and universal cycles*, Department of Computer Science, North Carolina State University, Raleigh, NC, October, 1989.

151. *From Ramsey Theory to random graphs via the probabilistic method*, Department of Mathematics and Computer Science, Wake Forest University, Winston Salem, NC, October, 1989.

Seminars

152. *A new Erdős-Ko-Rado problem on graphs*, Department of Mathematics and Applied Mathematics, Virginia Commonwealth University, Richmond, VA, November, 2024.

153. *On the Holroyd-Talbot conjecture*, Alfréd Rényi Institute of Mathematics, Hungarian Academy of Sciences, Budapest, Hungary, October, 2023.

154. *Graph pebbling problems and paradigms*, Alfréd Rényi Institute of Mathematics, Hungarian Academy of Sciences, Budapest, Hungary, October, 2023.

155. *On the Holroyd-Talbot conjecture for sparse graphs*, Department of Mathematics and Applied Mathematics, Virginia Commonwealth University, Richmond, VA, April, 2022.

156. *Pebbling in powers of paths II*, Department of Mathematics and Applied Mathematics, Virginia Commonwealth University, Richmond, VA, May, 2021.

157. *Pebbling in powers of paths*, Department of Mathematics and Applied Mathematics, Virginia Commonwealth University, Richmond, VA, February, 2020.

158. *Pebbling on chordal graphs*, Department of Mathematics and Applied Mathematics, Virginia Commonwealth University, Richmond, VA, February, 2019.

159. *Injective proofs of the Erdős-Ko-Rado and Hilton-Milner theorems*, Department of Mathematics, George Washington University, Washington, DC, October, 2018.

160. *Injective proofs of the Erdős-Ko-Rado and Hilton-Milner theorems*, Department of Mathematical Sciences, University of Delaware, Newark, DE, September, 2017.

161. *Injective proofs of the Erdős-Ko-Rado and Hilton-Milner theorems*, Department of Mathematics and Applied Mathematics, Virginia Commonwealth University, Richmond, VA, September, 2017.

162. *Erdős-Ko-Rado theorems*, School of Mathematics, Georgia Institute of Technology, April, 2017.

163. *The Erdős-Ko-Rado theorem*, Department of Mathematics, University of N. Carolina, Greensboro, NC, February, 2017.

164. *The Erdős-Ko-Rado theorem and generalizations on graphs*, Department of Mathematics and Applied Mathematics, Virginia Commonwealth University, Richmond, VA, October, 2016.

165. *Generalizing Erdős-Ko-Rado*, Department of Mathematics and Applied Mathematics, Virginia Commonwealth University, Richmond, VA, March, 2016.

166. *An introduction to universal cycles*, Department of Mathematics and Applied Mathematics, Virginia Commonwealth University, Richmond, VA, September, 2014.

167. *Pebbling in split graphs*, Department of Mathematics, George Mason University, Fairfax, VA, October, 2012.

168. Discrete Mathematics Seminar, Department of Mathematics and Statistics, Arizona State University, Tempe, AZ, 1990 – 2014 (41 talks).

209. *Pebbling in graphs, I–V*, Combinatorial Mathematics Seminar, Department of Mathematics, Dartmouth University, Hanover, NH, February, 1997 (4 talks).

K-12 Schools

213. *Moving stuff around on graphs*, Math Honor Society (online), Deep Run High School, Richmond, VA, January, 2021.

214. *Puzzles, logic, and games*, Let's Innovate Conference 9–12, MathScience Innovation Center, Richmond, VA, February, 2020.

215. *Alhambra, Penrose, and Conway tilings II*, Richmond Montessori School, Richmond, VA, December, 2019.

216. *Alhambra, Penrose, and Conway tilings I*, Richmond Montessori School, Richmond, VA, December, 2019.

217. *Coloring and symmetry II*, Richmond Montessori School, Richmond, VA, December, 2018.

218. *Coloring and symmetry I*, Richmond Montessori School, Richmond, VA, December, 2018.

219. *Mathematical juggling*, Deep Run High School, Richmond, VA, December, 2018.

220. *Mathematical juggling*, Clover Hill High School, Richmond, VA, November, 2018.

221. *Mathematical juggling*, Trinity Episcopal School, Richmond, VA, November, 2018.

222. *Buds and sprouts II*, Richmond Montessori School, Richmond, VA, December, 2017.

223. *Buds and sprouts I*, Richmond Montessori School, Richmond, VA, December, 2017.

224. *The Magic sorter*, Sonya Kovalevsky Day, MathScience Innovation Center, Richmond, VA, December, 2017.

225. *Jugglematics II*, Richmond Montessori School, Richmond, VA, May, 2017.

226. *Jugglematics I*, Richmond Montessori School, Richmond, VA, May, 2017.

227. *Secret sequences II*, Richmond Montessori School, Richmond, VA, December, 2016.

228. *Secret sequences I*, Richmond Montessori School, Richmond, VA, December, 2016.

229. *Jugglematics*, Sonya Kovalevsky Day, MathScience Innovation Center, Richmond, VA, December, 2016.

230. *Color curves II*, Richmond Montessori School, Richmond, VA, May, 2016.

231. *Color curves I*, Richmond Montessori School, Richmond, VA, May, 2016.

232. *Nim II*, Richmond Montessori School, Richmond, VA, December, 2015.

233. *Nim I*, Richmond Montessori School, Richmond, VA, December, 2015.

234. *The magic sorter II*, Richmond Montessori School, Richmond, VA, May, 2015.

235. *The magic sorter I*, Richmond Montessori School, Richmond, VA, May, 2015.

236. *Mathemagics II*, Richmond Montessori School, Richmond, VA, January, 2015.

237. *Mathemagics I*, Richmond Montessori School, Richmond, VA, December, 2014.

238. *How to color differently*, Desert Garden Montessori School, Phoenix, AZ, May, 2014.

239. *Prime real estate*, Desert Garden Montessori School, Phoenix, AZ, December, 2013.

240. *Mathemagics*, Desert Garden Montessori School, Phoenix, AZ, April, 2013.

241. *Buds and sprouts: a mathematical garden*, Desert Garden Montessori School, Phoenix, AZ, May, 2012.

242. *Jugglematics*, Desert Garden Montessori School, Phoenix, AZ, May, 2011.

243. *The magic sorter*, Desert Garden Montessori School, Phoenix, AZ, May, 2010.

244. *Mathemagics*, Christ the King School, Mesa, AZ, May, 2010.

245. *Mathemagics*, Chandler Preparatory Academy, Chandler, AZ, January, 2010.

246. *Jugglematics*, Chandler Preparatory Academy, Chandler, AZ, January, 2010.

247. *The magic map of Khartoum*, Desert Garden Montessori School, Phoenix, AZ, October, 2009.

248. *Cryptologic cards*, Prescott High School, Prescott, AZ, January, 2003.

249. *Cryptologic cards*, Mountain Pointe High School, Phoenix, AZ, November, 2001.

250. *Cryptologic cards*, Corona High School, Tempe, AZ, November, 2001.

251. *Juggling mathematics*, Mountain Pointe High School, Phoenix, AZ, November, 2001.

252. *Juggling mathematics*, Corona High School, Tempe, AZ, November, 2001.

253. *Ramsey game theory*, McClintock High School, Tempe, AZ, April, 1995.

254. *Card tricks with mathematics*, Aridondo Elementary School, Tempe, AZ, January, 1995.

255. *Mathematics and card tricks*, Gilbert High School, Gilbert AZ, October, 1994.

Other

256. *Mathemagics*, Richmond and Tidewater Mensa Youth, Midlothian Library, Midlothian, VA, December 5, 2015.

257. *Eventown & Oddtown*, Visiting lecture, MATH 490 Math Expositions, VCU, September, 2015.

258. *3-4-5 it*, Masonic Lodge 211, Midlothian, VA, April, 2015.

259. *Coloring squiggles*, Visiting lecture, MATH 490 Math Expositions, VCU, September, 2014.

260. *The mathemagics of cards*, ASU Mathematics Awareness Month, ASU, April, 2014.

261. *Mathemagics*, ASU Night of the Open Door, ASU, March, 2012.

262. *Jugglematics II*, ASU Math Circle, ASU, April 2011.

263. *Jugglematics I*, ASU Math Circle, ASU, March 2011.

264. *Mathematical cards*, Hampshire College, Amherst, MA, August 2010.

265. *The joy of elects II: the perfect body*, University Presbyterian Church, Tempe, AZ, October 2008.

266. *The joy of elects I: winner take all*, University Presbyterian Church, Tempe, AZ, October 2008.

267. *Family trees*, Mathematics and Theoretical Biology Institute, Institute for Strengthening the Understanding of Mathematics and Sciences, ASU, July, 2007.

268. *My generation*, Mathematics and Theoretical Biology Institute, Institute for Strengthening the Understanding of Mathematics and Sciences, ASU, July, 2007.

269. *Hamiltonian, eulerian, and universal cycles*, Mathematics and Theoretical Biology Institute, Institute for Strengthening the Understanding of Mathematics and Sciences, ASU, June, 2006.

270. *Three intimately unrelated problems*, Mathematics and Theoretical Biology Institute, Institute for Strengthening the Understanding of Mathematics and Sciences, ASU, June, 2006.

271. *Graph pebbling: almost surely bootlegging*, ASU Campus Match, October, 2003.