

ASSOCIATION FOR
WOMEN IN MATHEMATICS

The purpose of the Association for Women in Mathematics is to create a community in which women and girls can thrive in their mathematical endeavors, and to promote equitable opportunity and gender-inclusivity across the mathematical sciences.

IN THIS ISSUE

- 2 AWM at MAA MathFest**
- 6 AWM 2025 Elections**
- 17 AWM Student Column**
- 18 Book Review**
- 21 AWM Names Five Fellows for 2026**
- 22 Louise Hay Award**
- 24 M. Gweneth Humphreys Award**
- 26 2026 AWM-Microsoft Research Prize**
- 27 2026 AWM-Sadosky Research Prize**
- 28 2026 AWM Service Awards**
- 30 Media Column**
- 32 AWM at the 2025 SIAM Annual Meeting**
- 37 Education Column**
- 39 Ann: The Stay-at-Home-Mom**
- 40 In Memoriam: Vicki Powers**

Newsletter

VOLUME 55, NO. 6 • NOVEMBER-DECEMBER 2025

PRESIDENT'S REPORT

The last time I wrote, I was leaving the SIAM Annual Meeting in Montréal, Québec, Canada, heading home for a few days before traveling west to Sacramento, for the MAA MathFest. The weather in Sactown, as the locals call it, was great. There was the perfect combination of sun and breeze. That duo added to the energy of the conference—refreshing and reinvigorating. Not knowing it at the time, I needed those positive vibes as I walked into the academic year. How has your year been thus far? I hope the first things to come to mind are ones that make you smile and lead to a spirit of gratefulness.

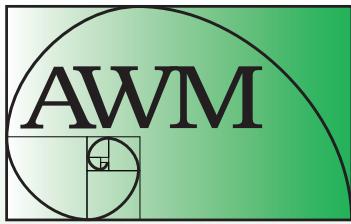
I am grateful for the over 250 volunteers, 51 committees, and dedicated AWM staff who are committed to our mission. I invite and encourage you to slow down and intentionally read this issue of the newsletter. It highlights all that is the Association for Women in Mathematics (AWM). As you read, you will feel our impact as we continuously strive to create a community where women and girls can thrive in their mathematical pursuits. Our ability to promote equitable opportunities and gender inclusiveness across the mathematical sciences is only possible because of their, and your, diligence.

Friends, unfortunately, our diligence is being challenged. Yet, we must hold fast to our mission and let our actions speak louder than any doubt. We must remain persistent in our advocacy. It is our responsibility and privilege to endorse policy statements that promote justice and accountability in academia, national laboratories, industry, and other professional spaces. We must maintain meaningful programming. Our duty to host mentoring programs, workshops, and lectures remains. We must forge ahead as we give awards and recognize excellence at all career stages.

Our task to create a welcoming atmosphere where women and marginalized genders thrive is at the forefront of our minds. We continue supporting over 100 student chapters worldwide and encouraging collaboration through research networks and professional development opportunities. Most recently, we hosted a webinar through the Communicating Employment Opportunities Series on the role of mathematical sciences at national laboratories. Our organization is offering financial support to active student chapters to enhance the mathematical communities at their institutions.

Looking ahead with gratefulness and diligence, I invite you to join us at the 2026 Joint Mathematics Meetings in our nation's capital from January 4–7. The AWM will host a suite of events including five special sessions on topics including stochastic methods in modern generative AI and the creative intersections of math, art, and pedagogy. The AWM-AMS Noether Lecturer is Monica Visan, Professor of Mathematics at the University of California, Los Angeles. As a leading figure in nonlinear dispersive equations and an exceptional educator, Visan's lecture is expected to shine as a key feature of the conference. Undoubtedly, we will also host our annual business meeting on January 4; reception and awards ceremony, panel, and graduate student poster presentation, all take place on January 6. There is a special session each day of the meeting. The suite of events will inspire us to foster ideas, reconnect with friends, and forge new friendships.

continued on page 2



ASSOCIATION FOR WOMEN IN MATHEMATICS

AWM was founded in 1971 at the Joint Meetings in Atlantic City.

The *Newsletter* is published bi-monthly. Articles, letters to the editor, and announcements are welcome. Authors sign consent to publish forms. The electronic version is freely available at awm-math.org.

Opinions expressed in *AWM Newsletter* articles are those of the authors and do not necessarily reflect opinions of the editors or policies of the Association for Women in Mathematics.

Circulation: 3500. © 2025, AWM

EXECUTIVE COMMITTEE

President

Raegan Higgins
Texas Tech University
Department of Mathematics & Statistics
1108 Memorial Circle
Lubbock, TX 79409-1042
raegan@awm-math.org

Past President Talitha Washington

Treasurer Mary Shepherd

Clerk Alejandra Alvarado

At-Large Members

Rebecca Garcia	Caroline Klivans
Courtney Gibbons	Emille Lawrence
Monica Jackson	Rosa Orellana
Gizem Karaali	Shanise Walker

Media Coordinator

Kimberly Ayers,
socialmedia@awm-math.org

Meetings Coordinator

Lakeshia Legette Jones,
meetingscoordinator@awm-math.org

Newsletter Editor

Dandrielle Lewis,
awmnewsletteeditor@awm-math.org

NEWSLETTER TEAM

Margaret Bayer, Book Review
Jacqueline Dewar, Education Column
Jenny Fuselier, Associate Editor,
fuselier@awm-math.org
Meghan Lee, Student Column
Sarah Greenwald, Media Column
Nandhini Ravishankar, Student Column
Alice Silverberg, Media Column

PRESIDENT'S REPORT *continued from page 1*

If you can, extend your visit through January 9 so you can join us for Capitol Hill Day on January 8. On that Thursday, we join other professional mathematical societies to meet with congressional officers to share the importance of our field. No prior experience is needed; just a desire to highlight how federal policies impact our community and the interconnected STEM ecosystem.

While I thought my time as AWM president would be filled with thinking about and implementing new programs and initiatives to support all women, especially young girls, in math, most of my AWM energy has been spent thinking how we can continue all that we do. I am grateful for a deeply committed Executive Committee and reliable committee members, volunteers, and staff. I cannot express the appreciation I have for the candid and thoughtful advice of past president Talitha Washington who will be leaving me soon and for Darla Kremer who balances strategic insight with empathy. Both offer measured guidance while empowering me to lead with autonomy and confidence. In the season of thankfulness, I am grateful for you—the AWM community who is committed to the work of making the mathematical sciences a place for all.



Raegan Higgins
Lubbock, TX
September 28, 2025



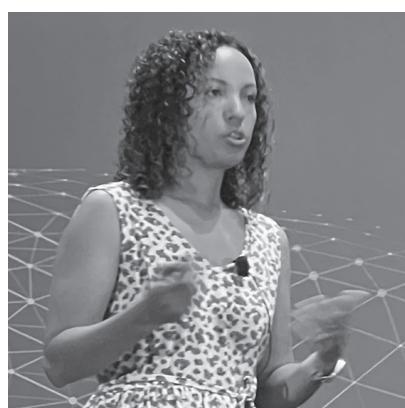
Raegan Higgins

AWM at MAA MathFest

Lakeshia Legette Jones, AWM Meetings Coordinator, and Jeanette Shakalli, AWM-MAA MathFest Committee Chair

The Mathematical Association of America hosted MAA MathFest 2025 in Sacramento, CA from August 6th through August 9th.

Olivia Prosper Feldman, University of Tennessee, kicked off the AWM events on Thursday, August 7th, 9:00 am – 9:50 am by delivering the 2025 AWM-MAA Etta Zuber Falconer Lecture, *Modeling Malaria at Multiple Scales: Implications for Parasite Diversity*.



Olivia Prosper Feldman delivers the 2025 AWM-MAA Etta Zuber Falconer Lecture at MAA MathFest.

Those in attendance learned about how genetically new strains of malaria emerge and how a deeper understanding of the impact of drug resistance can inform the choice of treatment strategies.

Feldman, along with **Lauren Childs**, Virginia Tech, and **Jordan Pellett**, University of Tennessee, organized an associated AWM-MAA invited paper session, *Mathematical Insights at Different Biological Scales*, that took place on Thursday and Friday and featured the following talks:

- Multiscale Modeling of Prion Disease
Mikahl Banwarth-Kuhn, California State University, East Bay



AWM President Raegan Higgins honors Olivia Prosper Feldman as the 2025 Etta Zuber Falconer Lecturer.

- Characterizing Extremes Across Scales: Dengue Outbreaks and Climatic Variability in Latin America and Asia
Váleri N. Vásquez, *Stanford University*
- A Flexible Model for Temperature-dependent Biological Traits and Its Application to Age-dependent Mortality
Mauricio Cruz-Loya, *Stanford University*
- SEIR-type ODE Models with Phase-type Latent and Infectious Period Distributions
Paul Hurtado, *University of Nevada, Reno*

On Thursday afternoon, the AWM-MAA MathFest Committee, (**Sarah Kerrigan**, *George Fox University*, **Lakeshia Legette Jones**, *Clark Atlanta University*, **Julia Yael Plavnik**, *Indiana University Bloomington*, **Jessie Loucks-Tavitas**, *California State University, Sacramento*, and **Jeanette Shakalli**, *Panamanian Foundation for the Promotion of Mathematics-FUNDAPROMAT*) organized the third event in a series of panel discussions on mental health. This session was entitled *Mental Health in the Mathematics Community: The Conversation Doesn't End*. Panelists were **Geillan Aly**, *Compassionate Math*, **F. Taína Amaro**, *Cadence Consulting*, **Tim Chartier**, *Davidson College*, **Jeff Johannes**, *SUNY Geneseo*, and **Emille Lawrence**, *University of San Francisco*. **Jeanette Shakalli** moderated. More than 60

continued on page 4



The panel
“Mental Health in
the Mathematics
Community:
The Conversation
Doesn’t End.”

The panel
“Sonia Kovalevsky
(SK) Days.”



Membership Dues

Membership runs from Oct. 1 to Sept. 30

Individual: \$70/\$100 Family: \$40

Contributing: \$160/\$190

New member, affiliate and reciprocal members, retired, part-time: \$35

Student: \$25 Unemployed: \$20

Outreach: \$10

AWM is a 501(c)(3) organization.

Institutional Membership Levels

AWM offers a tiered pricing structure for institutional memberships in six categories. Higher levels are:

Supporting Institutions: \$750+

Sponsoring Institutions: \$3000+

See awm-math.org for details.

Executive Sponsorship Levels

\$5000+

\$2500–\$4999

\$1000–\$2499

See awm-math.org for details.

Print Subscriptions and Back Orders—

Regular and contributing members living in the US may elect to receive a print version of the *Newsletter*. Libraries, women's studies centers, non-mathematics departments, etc., may purchase a subscription for \$75/year. Back orders are \$20/issue plus shipping/handling (\$5 minimum).

Payment—Payment is by check (drawn on a bank with a US branch), US money order, or international postal order. Visa and MasterCard are also accepted.

Newsletter Ads—AWM will accept advertisements for the *Newsletter* for positions available, programs in any of the mathematical sciences, professional activities and opportunities of interest to the AWM membership and other appropriate subjects. The Managing Director, in consultation with the President and the Newsletter Editor when necessary, will determine whether a proposed ad is acceptable under these guidelines. *All institutions and programs advertising in the Newsletter must be Affirmative Action/Equal Opportunity designated*. Institutional members receive discounts on ads; see the AWM website for details. For non-members, the rate is \$130 for a basic four-line ad. Additional lines are \$16 each. See the AWM website for *Newsletter* display ad rates.

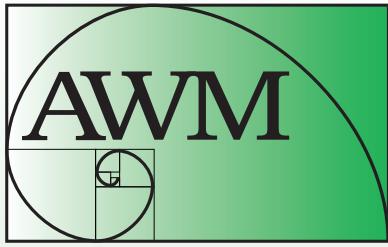
Newsletter Deadlines

Editorial: 17th of January, March, May, July, September, November

Ads: Feb. 1 for March–April, April 1 for May–June, June 1 for July–August, August 1 for September–October, October 1 for November–December, December 1 for January–February

Addresses

Send all queries and all *Newsletter* material except ads and material for columns to Dandriele Lewis, awmnewsletteeditor@awm-math.org. Send all book review material to Marge Bayer, bayer@ku.edu. Send all education column material to Jackie Dewar, jdewar@lmu.edu. Send all media column material to Sarah Greenwald, appalachianawm@appstate.edu and Alice Silverberg, asilverb@uci.edu. Send all student chapter corner queries/material to Monica Morales-Hernandez, student-chapters@awm-math.org. Send ads and address changes to AWM, awm@awm-math.org. Send all Student Column material to Meghan Lee, meghanlee@ucsb.edu.



ASSOCIATION FOR
WOMEN IN MATHEMATICS

AWM ONLINE

The *AWM Newsletter* is freely available online.

Online Ads Info: Classified and job link ads may be placed at the AWM website.

Website: <https://awm-math.org>
Updates: webmaster@awm-math.org

Media Coordinator
Kimberly Ayers, socialmedia@awm-math.org

AWM DEADLINES

February 1, 2026:
Deadline for RCCW Proposals

February 1, 2026:
Deadline for the AWM Essay Contest

February 15, 2026:
Deadline for applications for the
AWM Travel Grants

February 15, 2026:
Deadline for applications for the
AWM Mentoring Travel Grants

AWM OFFICE

Darla Kremer, Executive Director
darla@awm-math.org

Samantha Faria, Managing Director
samantha@awm-math.org

Association for Women in Mathematics
Attn: Samantha Faria
201 Charles Street
Providence, RI 02904
401-455-4042
awm@awm-math.org

AWM AT MAA MATHFEST *continued from page 3*

people attended this open and empathetic dialogue on mental health to raise awareness, inspire positive change, and improve the well-being of our unique and vibrant community.

The AWM-MAA MathFest Committee organized a second panel on Sonia Kovalevsky (SK) Days. Panelists **Jennifer Austin**, *University of Texas at Austin*, **Jessie Hamm**, *Winthrop University*, **Elizabeth Hale**, *Florida Polytechnic University*, **Adriana M. Ortiz Aquino**, *Whitman College*, **Andrea Arnold**, *Worcester Polytechnic Institute*, and **Janet Page**, *North Dakota State University*, shared how they have implemented SK Days, and offered advice on how to get started. The panel was moderated by **Shanise Walker**, *Clark Atlanta University*. This AWM session aimed to empower more members of the mathematics community to return to their own institutions and organize SK Days throughout the world.

The AWM program ended with *Mathematical Games and Puzzles: Fun For All!* that was full of faculty, students, and other members of the mathematics community of all ages.



The workshop featured the special participation of extraordinary mathematicians like Arthur Benjamin, Liz McMahon, Karl Schaffer, Ron Taylor, Timothy Goldberg, Tomas Rokicki, Phil Yasskin, Mariah Birgen, Jessie Loucks-Tavitas, and Jeanette Shakalli, who brought their favorite games and puzzles to share with other math enthusiasts. Backgammon, origami, the Game of SET, Rubik's Cube Mosaics, EvenQuads, Projective SET, finger geometry and rope magic tricks were among the fun math activities that attendees of the session were able to explore. The positive feedback received from this AWM-sponsored workshop has been overwhelming. More than 100 people enjoyed discovering the beauty and richness of mathematics through these hands-on activities.



Participants enjoy the AWM-sponsored workshop “*Mathematical Games and Puzzles: Fun For All!*”



Shanise Walker (right) is presented with the 2025 Henry L. Alder Award.

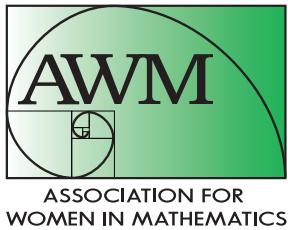
Below, left to right: National Association of Mathematicians President Asamoah Nkwanta, Lisa Blackwell (granddaughter of David Blackwell), and Talitha Washington.



AWM Executive Committee Members **Shanise Walker**, **Emille D. Lawrence**, and **Talitha Washington** were on hand to receive honors at the MAA MathFest. **Shanise Walker** was presented the 2025 Henry L. Alder Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member, and **Talitha Washington** delivered the 2025 NAM David Harold Blackwell Lecture, *100 Years of Inspiration: Elbert Frank Cox and the Future of Mathematics*.

AWM had an exhibit booth throughout the meeting, where volunteers stopped by to promote the AWM, sell AWM merchandise, and just hang out. This year, AWM participated in the Scavenger Hunt in which visitors stopped by the booth to ask the question “What inspired AWM to adopt their signature green color?”

The Association for Women in Mathematics is grateful for the support and partnership of the Mathematical Association of America. We look forward to planning some exciting activities for next year’s MAA MathFest in Boston next August 2026!



For the latest news, visit
awm-math.org

Association for Women in Mathematics 2025 Elections

This year, we are electing a President-Elect, a Clerk, and four Members-at-Large of the Executive Committee. Each of these positions are contested. Voting ended December 1, 2025. Those elected will take office on February 1, 2026. Candidate statements and biographical information follows.

PRESIDENT-ELECT CANDIDATE

Catherine A. Roberts Northwestern University

Biographical information: Catherine A. Roberts earned her bachelor's degree in mathematics and art history from Bowdoin College and her Ph.D. in applied mathematics from Northwestern University. Since 2001, she has been a faculty member at the College of the Holy Cross in Worcester, Massachusetts.

From 2016 to 2023, Roberts served as Executive Director of the American Mathematical Society, where she launched and advanced numerous initiatives, including the Next Generation Fund, which supports doctoral students and recent Ph.D. recipients. Under her leadership, the AMS established new departments for Communications, Development, and Diversity, Equity, and Inclusion as part of a broader strategic plan. She oversaw the launch of new journals, prizes, and fellowships, expanded the Society's presence in Washington, DC through enhanced policy work, and led a reimaging of the Joint Mathematics Meetings (JMM) better to reflect the full breadth of the mathematical sciences.

Roberts' research spans nonlinear Volterra integral equations modeling explosive phenomena and the mathematical modeling of human–environment interactions. A long-time supporter of the modeling community, she served for over a decade as Editor-in-Chief of *Natural Resource Modeling*, where she championed constructive, timely peer review, especially for emerging scholars. She has organized numerous international and national conferences, including applied math and modeling sessions at major U.S. meetings. She briefly led the Consortium for Applied Mathematics and its Applications and has judged its modeling competitions multiple times.

At Holy Cross, she has chaired the Department of Mathematics and Computer Science and directed the Environmental Studies program. She regularly teaches courses in environmental reasoning and mathematical modeling.

An AWM Fellow, Roberts has devoted a significant portion of her professional life to service in the mathematical sciences and continues to work toward a more inclusive and thriving profession.

Statement: Like many of you, the AWM plays an instrumental role in my career. I joined as a graduate student and participated in AWM workshops—first at ICIAM and later at the JMM as a recent Ph.D. These experiences had a lasting impact. The people at those workshops welcomed me into the mathematical community, connected me with mentors, and helped me identify job opportunities.

Over the years, I have co-organized several AWM workshops and served on the panels and selection committees of other AWM events. Hoping to help re-envision career paths for academic women, I also served on the AWM Executive Committee as a Member-at-Large. I've been fortunate to contribute to several key AWM initiatives through service on the Committee on Committees, the Infrastructure Task Force, and the Mentor Network. I chaired both the Fundraising Committee and the Selection Committee for the Executive Director. I've also served as a judge for the AWM Essay Contest and contributed to the "Notable Women in Mathematics Playing Cards" project, working as both a reviewer and profile writer.

During my seven years as the Executive Director of the AMS, I appreciated the many opportunities to partner with the AWM. With both long-standing projects and innovative new initiatives, our efforts deepened my appreciation for the importance of honoring different perspectives when navigating delicate negotiations that people care deeply about.

I share all of this to convey my decades-long connection to the AWM and my deep admiration for this vital professional society. It would be a privilege to continue supporting its mission and members in the role of President.

In these unpredictable times, the future landscape for women and mathematics is uncertain. Support for science and women's participation in it is shifting rapidly. AWM leadership must remain steadfast in its mission. Much of AWM's programming depends on external funding, and with federal support increasingly at risk, identifying new sources of financial support has never been more urgent. I believe my experience with the AWM, AMS, and other professional societies will be an asset in these efforts.

The AWM is a beloved organization with a mission of critical importance. If elected, I will work collaboratively, energetically, and with deep care to help the AWM continue to thrive.



PRESIDENT-ELECT CANDIDATE

Cristina Villalobos *University of Texas Rio Grande Valley*

Biographical Information: Dr. Cristina Villalobos holds the Myles and Sylvia Aaronson endowed professorship in the School of Mathematical and Statistical Sciences (SMSS) at the University of Texas Rio Grande Valley. Her research areas lie in optimization, optimal control, and STEM education. From 2024-2025, she was interim Dean of the Honors College where she introduced new honors programs and initiatives, such as a summer undergraduate research program based on her prior experience directing programs for STEM students. From 2019-2024, she served as Associate Dean for Strategic Initiatives and Institutional Effectiveness in the College of Sciences reviewing assessment for its degree programs and initiating the Digital21 program that provided tablets and professional development to faculty and students for effective online teaching given the institution's distributed campuses. Dr. Villalobos served as Interim Director of SMSS from 2015-2017 transitioning the school with 75 faculty through the first two years of UTRGV's consolidation from UT-Brownsville and UT-Pan American. She increased the numbers of Latino and women tenure-track faculty by 33%, changed the direction of the proposed doctoral program making it more interdisciplinary, and introduced collaborative problem-solving sessions in a subset of courses.



Since 2011, she has served as Founding Director of the Center of Excellence in STEM Education, which provides resources for the academic, career, and professional development of students and outreach to the community. For over 15 years, she served as the site director on an NSF LSAMP grant, and she currently serves as the education coordinator of an NSF PREM grant. She also serves as associate director of the Regional Science and Engineering Fair, a prelude to the Regeneron competition, for K-12 students. Dr. Villalobos has served on advisory boards for various organizations and higher education institutions, including two National Academies committees.

In recognition of her national service for student/faculty mentoring and STEM leadership, she was awarded the 2020 Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring. She is also a recipient of the Gweneth Humphrey's Award from the AWM, UT System Board of Regents' Outstanding Teaching Award, SACNAS Distinguished Undergraduate Institution Mentor Award, and the Richard A. Tapia Achievement Award for Scientific Scholarship, Civic Science, and Diversifying Computing. In 2023, she was elected Fellow of the American Mathematical Society; she is also a Ford Foundation Fellow and Sloan Fellow. Dr. Villalobos was born and raised in the Rio Grande Valley of Texas, is a first-generation college graduate, and received her B.S in Mathematics from UT-Austin and her Ph.D. in Computational and Applied Mathematics from Rice University.

Statement: I am honored to have been nominated for the position of AWM President. I am currently serving on the AWM Committees on Committees and in the past served as chair of an awards committee.

The AWM has been a supportive organization for women mathematicians and has provided a voice for the needs of women mathematicians. In AWM, I have found a community of individuals who empower each other, support each other, and strive for excellence. As such, I welcome the opportunity to take AWM to the next level and seek new collaborations in addition to studying models of mentoring, networking, professional development, and skill building, making AWM more visible in the community, and introducing K-12 and outreach initiatives.

Serving in this position entails listening to AWM members and ascertaining how to move forward. In my experience, I have found that some of the best new ideas often come through listening and leveraging ideas from others. I have benefited from mentors and champions who have helped carve a smoother path for me and provided advice. Hence, continued mentoring of women mathematicians in teaching, research, and leadership will be a priority so that we continue to be at the table. Many times as a woman of color, I have been the sole Latina in a room of faculty/administrators. I certainly do not shy away from these experiences but rather embrace them knowing that I provide new ideas and a different view of solving problems. It is this experience, along with working with students and the mathematics community for over 20 years, that I bring to AWM.

To this position, I also bring leadership experience having served as interim School Director, Associate Dean, and interim Dean of the Honors College, and having worked with numerous advisory boards to increase female and underrepresented minority representation in STEM. As we face these challenging times, I will seek the community's guidance to build on the success of AWM. We will all work together to move forward together.

Photo credit: Jesus Alferez, UTRGV

AWM 2025 ELECTIONS

CLERK CANDIDATES

Dr. Angie Hodge-Zickerman *Northern Arizona University*

Biographical information: **Angie Hodge-Zickerman** is a Full Professor in the Department of Mathematics and Statistics and Chair of the Department of Educational Specialties at Northern Arizona University. She is nationally recognized for her work in mathematics education, inquiry-based learning (IBL)/active learning, technology in the STEM Mathematics fields, and mathematics teacher preparation. Dr. Hodge-Zickerman has served as a principal investigator, evaluator, and mentor on multiple NSF-funded projects, particularly within the Robert Noyce Teacher Scholarship Program. She co-leads the Arizona Women's Symposium in Mathematics (AWSiM), a regional initiative that promotes community and collaboration among women in mathematics. Her work consistently focuses on inclusive-minded mentorship, active learning, and increasing support structures for women and underrepresented groups in mathematics, statistics, data science, and mathematics education.



Statement: I am honored to be nominated for the position of Clerk of the Association for Women in Mathematics. AWM has long shaped my academic values and professional path, particularly through its commitment to mentorship, connection, and advocacy. As Clerk, I will bring strong organizational skills, clear communication, and a collaborative spirit to support AWM's ongoing work. I am passionate about sustaining inclusive, meaningful professional communities that empower women at all stages of their mathematical journeys. I look forward to serving the AWM membership and helping advance the organization's mission through careful stewardship and active engagement.

May Mei *Denison University*

Biographical information: **May Mei** is a Professor of Mathematics at Denison University, as well as the department chair. She received her BA from the University of California, Berkeley and her PhD from the University of California, Irvine. Her research involves the application of dynamical systems to mathematical physics. She has also worked on integer sequences and Happy Numbers, cellular automata, the epistemology and cognitive science of mathematics, and modeling mollusk growth. On campus, in addition to being an engaged and enthusiastic instructor who treats teaching as a craft and hones her pedagogy intentionally, May is active in shared campus governance and has served as Chair of the Faculty. In the mathematics community, May chairs the Mathematical Association of America's Committee on Program Review and she is co-PI on a grant to transform the way departments engage in program review by creating new training structures, supporting follow-up actions, and documenting strategies for enacting change.



Statement: I went through a few drafts of this statement of varying degrees of depth and profundity. And I settled on a simple thought exercise: You arrive at a party and you don't know anyone, everyone has already formed small groups and so you stand by yourself in a corner. You arrive at a party and you don't know anyone, someone introduces themselves to you and makes room for you in the conversation. I want the field of mathematics to be like the latter, instead of the former, and so does the Association for Women in Mathematics. As Clerk and a member of the Executive Committee, I will help steward the organization with that goal in mind.

AWM 2025 ELECTIONS

MEMBERS-AT-LARGE CANDIDATES

Dr. Bahar Acu Pitzer College fo the Claremont Colleges

Biographical information: **Bahar Acu** is an Assistant Professor of Mathematics at Pitzer College, part of the Claremont Colleges. She earned her B.S. in Mathematics from Middle East Technical University and completed her Ph.D. studies at the University of Southern California and the University of California, Los Angeles. She has held postdoctoral positions at Northwestern University, ETH Zürich in Switzerland, and the Institute for Advanced Study (IAS) in Princeton.

Acu's research on the geometry and topology of contact and symplectic manifolds has been supported by awards and fellowships from the Oberwolfach Research Institute for Mathematics, the IAS, and the National Science Foundation. She is the recipient of the Edward and Dolores Blum Research Prize, the Award for Excellence in Teaching in the Category of Mathematics, and the Theodore Edward Harris Teaching Prize from the University of Southern California. She served as lead editor of *Research Directions in Symplectic and Contact Geometry and Topology* (AWM Series, Springer) and as an associate editor for another AWM Series volume, *Advances in Mathematical Sciences*. Acu currently chairs the editorial board for the *Proceedings of the 2025 AWM Research Symposium* and the program board of the MAA's Southern California–Nevada Section.



Statement: I am honored to be nominated for the position of Member-at-Large on the AWM Executive Committee. Throughout my academic journey, I have, whether by intention or by instinct, sought out the individuals who would make up my “village”—those who cultivate spaces of quiet strength, where others are lifted simply by their presence and actions. I found support not always through direct mentorship, but through individuals whose resilience and example made it possible for me to persist on this path that academia demands. Intentional communities like the Association for Women in Mathematics have repeatedly shown me how transformative it is to be surrounded by people who hold space for others. With this nomination, it feels clear that it is now my turn to contribute more intentionally—to be that steady and proactive presence for others, and to help build the kinds of structures where support, visibility, and belonging are not exceptions but expectations.

Alongside my research, I have held several leadership roles, including founding *WiSCon*, a research collaboration network focused on supporting women and gender minorities in symplectic and contact topology. I led the organization of WiSCon's first research collaboration workshop (currently organizing the second at UCLA!), served on the editorial board for two AWM proceedings volumes published in the AWM Springer Series, and am currently chairing the editorial board for the proceedings of the 2025 AWM Research Symposium. I have also organized multiple AWM and AMS special sessions and workshops aimed at fostering inclusive collaboration and mentorship, and have helped secure various institutional and national grant funding to support first-generation students and inclusive research environments.

If elected, I plan to build on these experiences by supporting initiatives and programs that encourage sustained, collaborative research networks across career stages and identities. I am particularly interested in expanding outreach to fellow first-generation and underrepresented students and in addressing the specific challenges they face in the national level. I also hope to contribute to AWM's editorial and publication initiatives to help amplify underrepresented voices, and to draw on my experience serving on various NSF panels to help members better navigate funding opportunities.

I recognize that the strength of AWM lies in its diverse, engaged, and evolving community. I am committed to working collaboratively to develop programs that are inclusive, responsive to the needs of all members and rooted in the values that have shaped my own academic path.

Photo credit: Dr. Fanhui Xu (with permission from Amherst College)

AWM 2025 ELECTIONS

MEMBERS-AT-LARGE CANDIDATES

Keisha Cook *Clemson University*

Biographical information: Keisha Cook is an Assistant Professor in the School of Mathematical and Statistical Sciences at Clemson University. She received a Bachelors Degree in applied mathematics from The University of Alabama in 2014 and a PhD in applied mathematics and computational biology from The University of Alabama in 2019. She also completed a postdoctoral research position at Tulane University at the NSF-Simons Southeast Center for Mathematics and Biology. Her interdisciplinary research focuses on stochastic processes, with applications in single particle tracking, intracellular transport, and mathematical modeling across the fields of bioengineering, biophysics, and forestry. Her work in the mathematics community has been recognized, as she is a 2025 recipient of The Mary Beth Ruskai Research Fund for Women, an editor and reviewer of the AWM Research Symposium Proceedings, and a MAA Section Lecturer. Cook is the first Clemson University professor to receive a Gilliam Fellowship, supporting a minority PhD student in the sciences. She is a 2024 University of Alabama Graduate School Centennial Scholar Award recipient. At Clemson University, she serves as the AWM Student Chapter co-advisor. She enjoys fitness, travel, and fine dining.



Statement: I am excited for the opportunity to run for AWM Executive Committee Member at Large. I have held leadership positions for national organizations and conferences. I currently serve as a member of the AWM Canvassing Committee, the SMB Cell and Developmental Biology Committee Chair, a member of the MAA Committee on the Participation of Women, and as the Math For All Conference primary organizer (a conference focused on creating a welcoming and supportive environment for mathematicians). Previously, I have served as the SIAM Workshop Celebrating Diversity Chair, and a SIAM Annual Meeting Committee Member. I am an organizer and speaker for many conferences, workshops, and committees focusing on mentoring, highlighting, and providing opportunities for underrepresented minorities and women in mathematics; notably the AMIGAs program for women in applied mathematics, the Enhancing Diversity in Graduate Education (EDGE) program, and multiple REU programs. I have a keen interest in increasing the number of women and underrepresented students in mathematics. I am deeply committed to the mission and goals of AWM and women in the field of mathematics. The AWM has been a huge part of my career thus far and I hope to continue making a difference as a Member at Large. I am eager to contribute towards increasing the impact of the AWM.

AWM 2025 ELECTIONS

MEMBERS-AT-LARGE CANDIDATES

Dr. Tegan Emerson

*Pacific Northwest National Laboratory /
University of Texas El Paso / Colorado State University*

Biographical information: Dr. Tegan Emerson is a Chief Data Scientist and emeritus leader of the Mathematics, Statistics, and Data Science group in NSD. She leverages her mathematics background to develop data science solutions in support of the DOE mission. Specifically, Dr. Emerson focuses on assuring AI in high-consequence settings; both developing models that are assured by design and improving, evaluating, and understanding assurances for frontier models. Her work and technical leadership has supported innovations in hyperspectral imaging, overhead image analysis, models of atmospheric turbulence, signal processing, neuroscience, medical imaging, materials science, and many other application domains.

Dr. Emerson's research interests include geometric and topological data analysis, dimensionality reduction, image processing, generative AI, and optimization. Her work has resulted in over 30 peer-reviewed papers, invited talks, and development of first-of-their-kind capabilities. She is a prolific member of the broader scientific community holding joint appointments at two academic institutions, sitting on external advisory boards, leading and supporting organizational committees for academic and mission workshops, acting as an editor for the official journal of the Association of Women in Mathematics, and participating in strategy-defining activities. In 2022 Tegan, along with two of her PNNL colleagues, founded a collaborative research community in topology, algebra, and geometry in data science which has grown to include over 1000 researchers across the world. Through her engagement activities she cultivates collaboration and influences research directions to increase the tools and resources at our disposal to maintain a technological advantage for the nation.

Statement: I am honored to be considered for the role of AWM Executive Committee Member at Large. We are in a time of unprecedented technological change fueled by AI presenting both new opportunities and challenges for the mathematics community. For over a decade, I have dedicated my career to advancing the field of mathematical data science, bridging the worlds of theoretical frameworks and applied technologies. As a researcher, innovator, and collaborator, I have worked to solve complex problems in modeling, optimization, and machine learning, empowering teams across industries to turn data into actionable insights. My candidacy for Executive Committee Member-at-Large reflects my commitment to fostering progress, inclusivity, and collaboration across our data science and mathematical communities. Driven by a collaborative mindset and a vision for the future, I am eager to bring my diverse experiences spanning industry, academia, and national laboratories to the Executive Committee. Together, we can strengthen the foundation of mathematical data science and expand its benefits to communities worldwide.



AWM 2025 ELECTIONS

MEMBERS-AT-LARGE CANDIDATES

Amanda L. Folsom Amherst College

Biographical information: **Amanda L. Folsom** is the Bicentennial Professor of Mathematics at Amherst College, where she served as Department Chair or Associate Chair from 2019–21 and 2023–25. She received her BA in 2001 from the University of Chicago, and her PhD in 2006 from UCLA. Prior to joining the Amherst faculty in 2014, Folsom held positions at Yale, University of Wisconsin-Madison, and the Max Planck Institute, and she is a former member of the IAS. Folsom is the recipient of NSF grants including an NSF Career Award (2013–19). She was named a Simons Fellow in Mathematics (2018–19), and received the AMS Mary P. Dolciani Prize for Excellence in Research (2021).

Folsom has published numerous mathematics research and expository articles, and co-authored a research-level book on *Harmonic Maass Forms* published by the AMS. She advised a math PhD student and dozens of undergraduate math research students from Amherst and Yale, resulting in co-authored publications with her students. Folsom has twice served as a research project co-leader for Women in Number Theory (WIN5 2020 and WIN4 2017) also leading to co-authored publications, and served as co-editor for *AWM Research Directions in Number Theory: Women in Numbers IV*. Folsom's mathematics talks include an MAA Invited Address at the 2019 JMM.

Folsom serves on several professional committees including AMS Committee on Meetings and Conferences; AMS Levi L. Conant Prize Committee; MAA Committee on Invited Paper Sessions; American Institute of Mathematics (AIM) Scientific Research Board. She also serves on the editorial boards of mathematics journals including *Proceedings of the AMS* where she is the incoming Managing Editor, and *La Matematica*, Official Journal of the AWM.

Statement: I am honored to be nominated by the AWM Executive Committee as a candidate for the position of AWM Executive Committee Member at Large. I have benefitted from the support, programming, mission and community of the AWM, and strongly wish to give back to the organization, the mathematics profession, and people, through this potential role within the AWM. I am professionally and personally aligned with the AWM's mission to promote equitable opportunities and gender-inclusivity across the mathematical sciences. I am enthusiastic about the possibility of serving as a representative of our profession in this way, and in the face of changes and challenges within society and mathematics. In anticipation of this potential role, I am eager to listen to the thoughts of mathematicians at any career stage, background, or perspective. I approach this potential role backed by my experiences in research mentoring and publication, my service on several professional committees (AMS, MAA, AIM), my various editorial roles including incoming Managing Editor of *Proceedings of the AMS*, as a Department Chair, as a research advisor and mentor for undergraduates and women in number theory, and as a research active faculty member based at a PUI. I am grateful for and excited about the opportunity to give back, support and promote our mathematics community in this potential position with the AWM.



Photo credit: Maria Stenzel (with permission from Amherst College)

AWM 2025 ELECTIONS

MEMBERS-AT-LARGE CANDIDATES

Omayra Ortega Sonoma State University

Biographical information: **Omayra Y. Ortega**, Ph.D. is an Associate Professor of Applied Mathematics & Statistics at Sonoma State University. She earned dual bachelor's degrees in mathematics and music from Pomona College and went on to complete a master's degree in Public Health, as well as an M.S. and Ph.D. in Applied Mathematics & Computational Sciences at the University of Iowa. Her research focuses on mathematical epidemiology and computational biology, and she founded the Mathematical Epidemiology Research Group (MERG) to mentor undergraduates in modeling infectious disease dynamics. A dedicated advocate for equity in STEM, she has organized Sonia Kovalevsky Days since 2006, served on the AWM Mentor Match Committee since 2009, helped create the first deck of EvenQuads, and organized the 2018 AWM Research Symposium at Rice University. Dr. Ortega also served as President of the National Association of Mathematicians (2021–2024) and was named an AWM Fellow in 2023 for her mentorship, outreach, and service to the mathematics community.



Statement: I am excited to be considered for the Executive Committee of the Association for Women in Mathematics. Supporting and uplifting women in mathematics has been a central part of my career, from teaching applied mathematics, statistics, and data science to mentoring students through research and outreach initiatives. In my work overseeing the development of a degree program in data science, I have focused on creating inclusive pathways that open doors for students of all backgrounds, which aligns closely with AWM's mission to encourage women and girls to study, pursue, and advance in the mathematical sciences. I would leverage my past experiences in teaching, mentoring, leadership, and community-building to help advance the careers of women in mathematics and strengthen their representation in the field. I share AWM's vision of a vibrant and diverse community where mentorship, collaboration, and equity are at the forefront, and I would be honored to bring my experience and dedication to furthering this mission as a member of the Executive Committee.

Photo credit: Timothy Archibald (www.timothyarchibald.com (with permission from Sonoma State University)

CALL FOR PROPOSALS

Research Collaboration Conferences for Women

The AWM works to establish and support research networks for women in all areas of mathematics research. In particular, the AWM RCCW Committee provides mentorship and support to new networks wishing to organize a Research Collaboration Conference for Women (RCCW). The Committee offers help finding a conference venue, developing and submitting a conference proposal, and soliciting travel funding for participants. Thanks to a National Science Foundation grant, some funding may be available through the AWM to support new RCCWs, especially interdisciplinary proposals and proposals that bring together researchers from traditionally underrepresented populations.

Mathematicians interested in organizing the first conference of a new RCCW are invited to submit a proposal to the AWM describing the conference topic, potential co-organizers and project leaders, and potential participants. Proposals should be no more than one page (PDF files only, please) and should be sent to awm.rccw@gmail.com. Deadlines for submission: **July 1**.

More information about Research Collaboration Conferences for Women, existing RCCW networks, and related initiatives can be found at <http://awm-math.org/programs/research-networks/>.

AWM 2025 ELECTIONS

MEMBERS-AT-LARGE CANDIDATES

Julia Yael Plavnik *Indiana University Bloomington*

Biographical information: **Julia Yael Plavnik** is an Argentinian mathematician who earned her Ph.D. from Universidad Nacional de Córdoba in 2013. She held postdoctoral positions in Córdoba and Buenos Aires, and at Texas A&M University, where she had amazing mentors. Currently, she is the Charlotte Ann Griffin Associate Professor of Mathematics at Indiana University (Bloomington) and holds a part-time appointment at Vrije Universiteit Brussel. Julia has also held visiting positions at CRM and MSRI for thematic programs, and at Universität Hamburg as a Humboldt Research Fellow.

Her research focuses on quantum symmetries, particularly quantum algebra and quantum topology. She works on tensor categories and non-commutative algebras, such as Hopf algebras, and is especially interested in their applications in different areas of Mathematics and Physics. Julia is currently supported by an NSF CAREER grant, and she is part of the Simons Collaboration on Global Categorical Symmetries.

She serves on the editorial boards of a couple of journals and is currently on the Editorial Committee for the 2025 AWM Research Symposium Proceedings. Julia is dedicated to mentoring at all levels (from high school to postdoctoral), for which she was recognized at her home institution with the 2022 CEWIT Outstanding Faculty Mentor/Advocate Award. Julia is also the faculty advisor of the (undergraduate) Women in Math Club, the Peer Mentoring Initiative, and the AWM Chapter at IU.

Statement: I've always believed that each of us can make a difference; sometimes by starting small or locally, but always with the potential to create meaningful impact. For me personally, supportive networks, both personal and professional, and the guidance of mentors have been transformative. I wouldn't be where I am today without the incredible people I've been fortunate to have around me: my family, my friends, and many generous colleagues and collaborators, who offered their advice, encouragement, care, and unwavering support. These experiences shaped my path, and my goal is to continue the cycle of generosity by fostering community, building bridges across mathematical disciplines and different countries, and by fostering inclusive, welcoming spaces where people from all backgrounds feel they belong.

I envision a more human-centered academia and mathematical community where we can all genuinely enjoy engaging with mathematics in ways that resonate with us. This vision aligns closely with the AWM's mission, and I hope to contribute fresh ideas and advocate for a broader range of voices in our conversations. I also believe it's essential to listen attentively to the unique experiences, needs, and achievements of diverse groups so we can better support, resource, and celebrate them.

Since arriving in the U.S., I've been excited to engage with the AWM community through symposia and research networks, like WINART, WOA, and WOMAP, and serving on various committees. I'm grateful for the opportunities AWM has offered me, and I would be honored to give back by serving as a member-at-large.

Photo shared with permission of Indiana University, Department of Mathematics



AWM 2025 ELECTIONS

MEMBERS-AT-LARGE CANDIDATES

Wendy M. Smith *University of Nebraska-Lincoln*

Biographical information: Wendy Smith (they/she) is the Willa Cather Professor of Mathematics at the University of Nebraska-Lincoln and the director of the Center for Science, Mathematics, and Computer Education. As a former middle school mathematics teacher and current research professor, Smith's degrees (BS, MA, PhD) are from the University of Nebraska-Lincoln. Their research is in mathematics education, and has grown from studying the impacts of professional development on teaching practices to studying leadership and culture aimed at improving equitable and inclusive mathematics teaching and learning. In 2024, Smith was awarded a Women of Courage, Character, and Commitment by the University of Nebraska-Lincoln's Gender and Sexuality Center, and also was selected as the Gordon Woodward Fellow of the University of Nebraska-Lincoln College of Arts and Sciences Teaching Academy.



Statement: I am honored to be considered for the AWM executive committee as a member at large. Throughout my career I have been passionate about mentoring women and queer folk in the mathematical sciences. My research is in mathematics education, focused on how we can positively change systems and cultures to foster more belonging and inclusion in mathematics across PK-12 and college, while also improving mathematics teaching and learning. I also have studied both effective inclusive leadership practices (PK-12 and higher education) and ethics in higher education research practices related to the inclusion of individuals who are transgender or have other marginalized genders. My research and mentoring activities both align with the AWM mission to promote equitable opportunity and treatment of women and other marginalized genders, and to encourage and promote the success of marginalized groups in mathematics. I greatly value collaboration and collegial relationships, and have been an invited speaker to talk about how to form and effectively sustain productive research teams and partnerships. I have not had a previous role in AWM, but have served on program committees, and other committees for other professional organizations, and regularly present at JMM. As a non-binary, queer mathematician and parent of two queer neurodivergent young adults, I bring those perspectives to the AWM executive committee. Organizations like AWM are more important than ever in the chaos of 2025 when equity and inclusion are under attack; I am excited to bring my experiences and leadership to the AWM executive committee to help AWM step up as a leader for mathematicians to support and promote the inclusion and success of mathematicians with marginalized genders.

Photo credit: UNL Communications, University of Nebraska-Lincoln

AWM 2025 ELECTIONS

MEMBERS-AT-LARGE CANDIDATES

Violeta Vasilevska *Utah Valley University*

Biographical information: **Dr. Violeta Vasilevska** was born and raised in Republic of North Macedonia and received her doctorate degree from the University of Tennessee, Knoxville. She moved to Utah in 2010 to join the Department of Mathematics at Utah Valley University (UVU), where she is currently a professor of mathematics.

She is passionate about teaching and enjoys implementing various active learning and student-centered approaches in her classes, cultivating an inclusive, interactive, and engaged environment while showing sincere care and respect for her students and their diverse learning styles.

Her research interests are diverse, ranging from topics in pure mathematics to topics in math education and she enjoys mentoring students through undergraduate research on these topics.

Since 2007, she has been leading and participating in various outreach programs that popularize mathematics, especially ones that encourage and support women in mathematics.

Dr. Vasilevska has also been actively involved with the national MAA as well as the Intermountain MAA Section serving in various leadership roles. The last two years she also served as AWM UVU Student chapter advisor.

Dr. Vasilevska has received several awards recognizing her teaching excellence, service, and her outreach efforts. Among her hobbies are her love for Origami and art, reading, traveling, and learning about different cultures.

Statement: I am deeply honored to be nominated for the AWM Executive Committee Member at Large. AWM has played a meaningful role throughout my professional journey: from the mentorship and funding opportunities to the supportive community of scholars. If elected, it would be a great privilege to give back by contributing to the leadership of this important organization and to its mission.

Throughout my career, I have been entirely committed to promoting equity, inclusion, and community engagement of women in higher education as well as in mathematics. I served as the Chair of the Utah Women in Higher Education Network at Utah Valley University, where I led initiatives focused on leadership development and institutional change for women across disciplines. As an outreach advocate for popularization of math, I have led several programs aimed at encouraging high school students—especially young women—to explore and enjoy mathematics through hands-on experiences and mentorship. In addition, I currently serve as the faculty advisor for the AWM UVU Student Chapter.

Through these roles, I've had the pleasure of mentoring women, organizing events that promote collaboration and visibility for women in mathematics, and helping to build a vibrant and inclusive (mathematical) community on and out-of-campus. I am excited about the opportunity to bring this experience to the AWM Executive Committee. Thank you for your consideration.



Conquering Conferences

By Delaney Morgan, University of Georgia, drm58277@uga.edu

Conferences are an important aspect of any mathematician's life. They are a place for presenting your own research, learning new mathematics, and networking. But as a young mathematician in undergrad or early graduate school, conferences can seem overwhelming and maybe even pointless. There are a lot of people you don't know, and high-level research talks can be difficult to follow at that level. However, conferences can be incredibly fun and rewarding experiences that you should take advantage of.

Choosing a Conference

Before you can attend your first conference, you have to choose which one to go to. Most math departments will send out emails or hang posters advertising conferences you might be interested in. Students who are a year or two ahead of you in your program might have recommendations for nearby conferences they have attended that they enjoyed. And of course, you should talk to your professors about what your options are and which will be the most beneficial for you.

If you are an undergraduate, I highly recommend attending a conference targeted specifically toward undergraduates. The talks will be more accessible, and you will get to meet peers from different universities. For example, I had a great time my senior year of college at the Nebraska Conference for Undergraduate Women in Mathematics.

You also shouldn't be intimidated by big conferences! Large conferences like the Joint Mathematics Meetings or the AWM Research Symposium can actually be perfect for an early career mathematician because there will be many options of activities to choose from. There may be research talks, roundtable discussions, and career panels. These large conferences often run parallel sessions, so you can pick and choose what sounds interesting to you. And there will usually be some sessions that are specifically made for undergraduates or beginning graduate students.

Finding Funding

You may be surprised to learn that there is plenty of funding available to make it financially feasible for an early career mathematician to attend conferences, even if you aren't giving a talk. Most conferences have some amount of funding set aside to assist students with travel. Obtaining this funding usually requires submitting an application. If needed, you can reach out to advisors within your math department for help with these applications. There are also frequently funds set aside by your department to support students traveling to conferences, which is another good place to start looking.

In general, conferences don't have to break the bank. If you stick close to home, split a carpool or hotel budget with friends, and take advantage of funding opportunities, they can be very affordable, even as a student.

Presenting Your Work

If you have participated in a Research Experience for Undergraduates (REU) or a research project, then you can (and should!) present that work at a conference you go to. Presenting mathematics is a skill that takes lots of practice. Short talks and poster presentations are the perfect place for you to practice your own mathematical communication skills. Being able to present your research in a way that your peers can understand is good practice for you, and for your future career.

It is also something that your peers want to see! It can be easy to convince yourself as a young mathematician that because you don't have a complicated, groundbreaking result, nobody cares about your research. But think about the other people attending the conference that are at the same level as you, who will be really excited to see an accessible talk. And conferences wouldn't set aside times for student talks and poster presentations if they didn't want you to participate!

Tips For Success

In the end, you are at a conference for two reasons. The first is to learn! You will definitely attend talks that you do not understand, but you should take notes so you can look things up later. You don't have to get everything out of a talk, but you should aim to get something out of every talk, even if it is just learning a new concept. Don't be afraid to ask questions. If you don't feel comfortable doing it during the question period, you can always go up to a speaker after the talk to ask them to explain something you missed.

The second reason you are there is to have fun! Conferences are a great opportunity to meet new people, who you will continue to connect with over the course of your career. Someone you meet at a conference now may be a future classmate or collaborator. And the more people you meet, the more people you will know the next time you attend a conference! Math is an inherently social activity, and meeting people and doing math with them should be fun.

BOOK REVIEW

Book Review Editor: Margaret Bayer, University of Kansas, Lawrence, KS, bayer@ku.edu

Oh No He Didn't! Brilliant Women and the Men Who Took Credit for their Work

Wendy J. Murphy
Cynren Press, 2024
ISBN 978-1947976436

Reviewer: Marge Bayer, bayer@ku.edu

The title tells the story. A couple of the subjects will be familiar: Rosalind Franklin and Katherine Johnson. This book presents 23 individual women and one group of 3 women who made important contributions that were attributed to men. Their contributions range from literature and the arts to science and technology, and even to games and politics. The author is a lawyer specializing in women's rights.

I will focus on some of the stories of science and inventions. Interested readers can also find in the book how Anna Arnold Hedgeman's crucial role in the central organizing committee for the 1963 March on Washington was left out of the history; how Auguste Rodin signed his name to some sculptures made by his former student and lover, Camille Claudel; and how Zelda Fitzgerald wrote in reviews that F. Scott had plagiarized her writings.

One common phenomenon was a couple working together on something for which the husband got all the credit. This includes the subject of the first chapter, Eunice Foote. In 1842, Eunice Foote and her husband, Elisha, invented a thermostatically controlled cooking stove. The patent application was in Elisha's name only because, as a woman, Eunice would not have been able to go to court in case of a patent infringement.

But a greater scientific injustice was wrought on Eunice Foote by a stranger, and she did not know about it. In the 1850s she had researched carbon dioxide, essentially discovering the greenhouse effect. She presented her work at two annual meetings of the American Association for the Advancement of Science and published papers in the *American Journal of Science and Arts*. However, a few years later a man (John Tyndall) presented research, claiming he was the first person to discover the thermal effect of the sun's rays on carbon dioxide. Murphy presents ample evidence that Tyndall would have known of Foote's work. She says that Tyndall's fraud was not brought to light until 2010, when geologist Ray Sorenson found some references to her work, and science historian John Perlin subsequently tracked down Foote's published papers.

A more famous man whose wife's contributions were not recognized was Albert Einstein. Letters by Albert sometimes acknowledged that he and his wife Mileva had worked on research and publications together, including referring to $E=mc^2$ as "our" work. But her name did not appear on the publications. Albert and

Mileva divorced before he received the Nobel Prize, but the divorce agreement promised Mileva the Nobel Prize money if he were to win it in the future, and she did get it. The author suggests that Albert Einstein's work went downhill without Mileva's help after the divorce.

Denise Scott Brown, originally from South Africa, studied architecture and urban planning at the University of Pennsylvania. She married a fellow architect, Robert Venturi, and after some years teaching, she became a partner in the architectural firm he started. They collaborated on books and building designs. The firm won the prestigious Pritzker Prize, but the prize committee honored only Robert. Robert asked the committee to award the prize to both of them, but they refused. Some thought that their refusal was due to an essay she had previously published about sexism in the architecture profession.

In addition to that of Eunice Foote, several other women's inventions were patented by others. Around 1900, Elizabeth Magie invented a game that is almost identical to Monopoly. Her motivation was to show how concentrating land in the hands of the few harmed society. She did, in fact, get a patent for the game, but she was not interested in marketing it. She shared it with the Quakers, who also did not market it. A guest, Charles Darrow, played it and then set about getting a patent and marketing it under his name, with no acknowledgment of the original inventor. Parker Brothers produced and sold the game, attributing it to Darrow. Eventually they had to change the attribution in the 1970s, after Magie was shown to be the inventor in a lawsuit over a game called Anti-Monopoly.

One woman inventor won her battle for a patent. After the Civil War, Margaret Knight (who at the age of 12 had invented a safety restraint for the looms at the factory where she worked) invented a machine that made paper bags. When she took it to a machinist to build a metal version, a customer, Charles Annan, listened to her explain the details, and quickly filed a patent application for it. She only learned this when her patent application was turned down. But in this case, she hired a lawyer and appealed her patent denial. Ultimately, the patent office commissioner ruled that Charles Annan had committed patent fraud and awarded the patent to Margaret Knight.

Other women's inventions that were claimed or patented by men include windshield wipers (Mary Anderson), disposable diapers (Marion Donovan), the hair straightener (Ada Harris), and signal flares (Martha Jane Coston). After her husband's death and after much further work, she perfected the device, but she believed that she could not be granted a patent, so she added her late husband's name to the application. The patent was granted to her only as the "administratrix" of her late husband's estate, in 1859. The signal flares were used extensively during the Civil War.

We know of some women (besides Mileva Einstein) in physics and chemistry, whose work was attributed to others or downplayed because of their gender. Lise Meitner shared a lab with Otto Hahn for 30 years, studying radioactive decay. She played a significant role in the discovery of nuclear fission but was unable to

complete the experiments because she had to leave Hitler's Germany. Hahn then won the Nobel Prize for their joint work, and Hahn publicly denied her role in the discovery. However, he did share the cash award with Meitner, who then contributed the money to the Emergency Committee of Atomic Scientists.

Chien-Shiung Wu emigrated from China to the US, where she got a physics PhD at Berkeley, and became a leading expert on beta decay. In the 1950s two physicists, Tsung-Dao Lee and Chen-Ning Yang, developed a theory that cast doubt on an accepted theory of conservation of parity. They asked Chien-Shiung to design an experiment to confirm their theory. Indeed she was able to do that. As a result, Lee and Yang, but not Wu, received the Nobel Prize. Yang and Lee thanked her in their acceptance speeches, but the Nobel Committee did not acknowledge Wu.

Jocelyn Bell-Burnell has had a very distinguished career in astrophysics and has received many honors. In 2018 she was awarded the Special Breakthrough Prize in Fundamental Physics, for which she received \$3 million, all of which she donated to a fund administered by the Institute of Physics to support women, minority, and refugee students studying physics. She was the second woman to receive the Copley Prize from the British Royal Society. And she was featured on an Irish postage stamp and a Northern Ireland bank note! But long before, as a graduate student, she discovered a then-unknown kind of star, a pulsar. Her PhD advisor Hewish and physicist Ryle were awarded the

Nobel Prize jointly in 1974, Hewish for the discovery of pulsars and Ryle for an imaging technique. While Bell-Burnell did not challenge her exclusion, others have criticized the decision. Professor Dame Bell-Burnell is currently (at age 82) a Professorial Fellow at Oxford.

The lack of acknowledgment of Alice Ball led to an argument played out in scientific publications. Harry Hollmann, an acting assistant surgeon at the Leprosy Investigation Station of the US Public Health Service in Hawai'i, asked Alice Ball to study chaulmoogra oil, which had been used in the treatment of leprosy for hundreds of years. She identified its chemical properties and developed an injectable form. Before she could publish her results, she became ill from exposure to chlorine in the lab, and died at the age of 24. Another chemist, Arthur Dean took her work and profited from selling the injectable chaulmoogra oil that she had developed. He published papers on the subject, claiming the development as his own and never citing Alice Ball. Hollmann called him out on this, and Dean and Hollmann debated the issue in several published papers.

Some of the women highlighted were also known to have been activists for women's rights. These include Eunice Foote, Elizabeth Magie, Anna Hagedorn, and Denise Scott Brown.

I have discussed just a small number of the women highlighted in Wendy Murphy's fascinating book. I recommend that you read the book to learn of other amazing women.

NSF-AWM Travel Grants for Women

Mathematics Travel Grants. The objective of the NSF-AWM Travel Grants is to enable women mathematicians to attend conferences in their fields, which provides them a valuable opportunity to advance their research activities and their visibility in the research community. Having more women attend such meetings also increases the size of the pool from which speakers at subsequent meetings may be drawn and thus addresses the persistent problem of the absence of women speakers at some research conferences. The Mathematics Travel Grants provide full or partial support for travel and subsistence for a meeting or conference in the applicant's field of specialization.

Selection Procedure. All awards will be determined on a competitive basis by a selection panel consisting of distinguished mathematicians appointed by the AWM. A maximum of \$2300 for domestic travel and of \$3500 for foreign travel will be funded. For foreign travel, US air carriers must be used (exceptions only per federal grants regulations; prior AWM approval required).

Eligibility and Applications. Please see the website (<https://awm-math.org/awards/awm-grants/travel-grants/>) for details on eligibility and do not hesitate to contact awm@awm-math.org or 401-455-4042 for guidance. Applications from members of underrepresented minorities are especially welcome.

Deadlines. There are three award periods per year. Applications are due **February 15, May 15, and October 1.**

Call for Proposals:

Host the 2027 AWM Research Symposium!



The Association for Women in Mathematics is seeking proposals from mathematics departments, institutes, and other appropriate venues interested in hosting the 2027 AWM Research Symposium.

In 2012, building on the success of the 40 Years and Counting Conference at Brown University the previous year, AWM launched a new series of Biennial Research Symposia (<https://awm-math.org/meetings/awm-research-symposium/>). The 2013 AWM Research Symposium was hosted by the Mathematics Department at Santa Clara University, with support from the American Institute of Mathematics (AIM) and the Mathematical Sciences Research Institute (MSRI). The Mathematics Department at University of Maryland, College Park hosted the 2015 AWM Research Symposium, and the 2017 Symposium was hosted by UCLA and the Institute for Pure and Applied Mathematics (IPAM).

The 2019 AWM Research Symposium was hosted by Rice University, while the 2021 Symposium was hosted in 2022 by the University of Minnesota and the Institute for Mathematics and its Applications. In 2023, Clark Atlanta University and the Atlanta University Center Data Science Initiative hosted the Symposium, while the University of Wisconsin-Madison hosted in 2025.

An AWM Symposium Organizing Committee—to include local coordinators—will be in charge of planning and scheduling the events, selecting speakers, session organizers, and panelists. Proposals should contain the following information:

- Name of a local organizer: a mathematician with ties to the institution that will host the symposium. This person will become a member of the AWM Symposium Organizing Committee.
- The location and proposed dates.
- A written endorsement from the person who has the authority to provide the space and resources needed for the symposium.
- A description of the space available. The basic requirements are approximately as follows:
 - one large lecture room with a capacity of at least 350
 - 15 to 20 classrooms for special sessions and other gatherings (each should accommodate 30 participants) available throughout the meeting
 - space for poster sessions (should accommodate around 25 posters)
 - space for exhibits
 - space for registration, coffee breaks
 - A description of the banquet facilities available (should accommodate 250–300 guests)
- A description of hotel space available within walking distance from the venue (or a plan for transportation to and from the hotel space)
- A list of support activities that will be provided by local staff (working with the AWM office and the Organizing Committee)
- AWM events adhere to the AWM Welcoming Environment and Diversity and Inclusion Policy. Please describe steps you as local organizers will take, and characteristics of your facilities that will ensure a welcoming environment for all participants.

Submit your proposal to the AWM Executive Director at ed.admin@awm-math.org before December 15, 2025.
Feel free to contact us with questions and concerns before submission.

AWM Names Five Fellows for 2026

The Association for Women in Mathematics (AWM) has named five mathematicians as 2026 AWM Fellows.

Rebecca E. Garcia, Colorado College

For her unwavering commitment to the advancement of women and underrepresented people in the mathematical sciences at all stages of their careers through roles such as co-director (2011–2015) of Pacific Undergraduate Research Experience in Mathematics (PURE Math), codirector of the Simons Laufer Mathematical Sciences Institute, formerly the Mathematical Sciences Research Institute (MSRI) Undergraduate Program (MSRI UP), and project director for the Mathematical Association of America (MAA)’s National Research Experiences for Undergraduates Program (NREUP), and her dedication to life-changing mentorship and community engagement.

Katharine Gurski, Howard University

For her exemplary contributions to the field of mathematical biology and indispensable mentorship of the next generations of women mathematicians at all career stages.

Rachel Levy, North Carolina State University

For her exceptional leadership and her contributions to knowledge, education, mentorship, communication, programs, professional development, and policy advocacy to broaden the appreciation of and participation in the mathematical sciences.

Jennifer K. Ryan, KTH Royal Institute of Technology

For outstanding and sustained commitment to advancing women in numerical analysis and scientific computing through inclusive leadership, impactful mentorship, service on committees at AWM and the Society for Industrial and Applied Mathematics (SIAM), and community-building efforts including organizing workshops that build collaborative networks, mentoring early career researchers, and championing diversity initiatives across institutions and international networks.

Rebecca Segal, Virginia Commonwealth University

For her years of leadership within AWM; for her dedication to supporting and promoting women in mathematical biology at all levels of expertise through research networks; and for her distinguished contributions to local, university, and professional causes that advance the participation of women and girls in the mathematics community.

The AWM Executive Committee established the Fellows Program to recognize members who have demonstrated a sustained commitment to the support and advancement of women in the mathematical sciences, consistent with the AWM mission: “to create a community in which women and girls can thrive in their mathematical endeavors, and to promote equitable opportunity and treatment of women and others of marginalized genders and gender identities across the mathematical sciences.”

Gerunda B. Hughes to Receive the Louise Hay Award for Contributions to Mathematics Education

*The Association for Women in Mathematics is pleased to announce the 2026 Louise Hay Award will be presented to **Gerunda B. Hughes**, professor emerita, Howard University (HU), for her exceptional contributions to mathematical assessment at all levels, her long-standing service to the education community, and her impactful work as a mentor and advocate for underrepresented students.*

Citation

Dr. Gerunda B. Hughes is a professor emerita in the Department of Curriculum and Instruction in the School of Education at Howard University, with undergraduate and master's degrees in mathematics and a PhD in educational psychology. An accomplished educator and researcher, her work has centered on educational assessment and how it can be used to improve mathematics teaching and learning. Over an illustrious fifty-plus-year career, she has taught mathematics at the postsecondary level and led various initiatives related to mathematics teaching, learning, and educational assessment at Howard and beyond.

Dr. Hughes's nomination letters attest to her impact on the field of mathematics education through her papers and research that focus on the interdependence among teaching, learning, and assessment. Renowned for her expertise, as noted by one of her nominators, Dr. Hughes "has used her talent, expertise, and moral force of character to move large-scale systems in the direction of social justice." She has led and contributed to national and state-level assessment programs "that are technically sound, aligned with stated content standards and learning outcomes, and culturally responsive to various demographic groups in order to maximize the validity of interpretations and uses of assessment results." Through her work, Dr. Hughes has had considerable influence in strengthening mathematics education in the United States by focusing on the importance of classroom assessments and "by making large-scale mathematics assessments more valid and more equitable."

Over the course of her career, Dr. Hughes has been deeply invested in conducting important research and influencing institutional policy and practice to ensure that assessments provide accurate measurement of and feedback about student learning in mathematics and other content areas, given the purpose of the assessment and whether the context is in the classroom or on standardized tests. In particular, as noted in her nomination letters, Dr. Hughes's long-standing work with the National Assessment of Educational Progress (NAEP) has been incredibly important and impactful, especially through her work of almost three decades on the NAEP Validity Studies (NVS) Panel. Given the importance of *The Nation's Report Card* in (a) establishing snapshots of student performance in mathematics and other areas as a benchmark for national and state grade-level performance trends, and (b) igniting key policy and practice recommendations and initiatives, this work is significant.



Gerunda B. Hughes

Additionally, Dr. Hughes has engaged in a "record of service to the education community" by serving on a number of national panels, boards, and advisory committees including those affiliated with Educational Testing Service (ETS), National Center for the Improvement of Educational Assessment (NCIEA), the American Educational Research Associations (AERA) the National Council on Measurement in Education (NCME), the National Academy of Education (NAEd), the National Council for Accreditation of Teacher Education (NCATE), the Smarter Balanced Assessment Consortium (SBAC), and the College Board. She has also served as an expert consultant to state and local departments of education across the country. As noted by one of her nominators, Dr. Hughes has had a noteworthy career using "statistical science in the service of equitable principles." Indeed, her work in assessment "has been as essential as it has been unsung."

We also gratefully acknowledge and highlight Dr. Hughes's work as a mentor, researcher, and advocate for underrepresented students in general, and in mathematics in particular. For twenty years, Dr. Hughes served as an instructor in the Center for Academic Reinforcement (CAR) at Howard University where she taught basic algebra to students who had been "conditionally admitted" to the University because they did earn a certain minimum score on the mathematics section of the SAT. She learned a lot about and from her students, including how people learn, how they demonstrate what they have learned, and the impact (positive or negative) of the interpretations and uses of test scores on individuals' lives.

Dr. Hughes has served as a mentor in the Ronald E. McNair Scholars Program and a former director of the highly regarded HU Alliance for Minority Participation-a STEM pipeline program. Among large-scale research projects, Dr. Hughes served as principal investigator of the "Classroom Assessment Project" in the Center for Research on the Education of Students Placed at Risk (CRESPAR) in which she and her team of research associates and graduate assistants conducted research funded by the US Department of Education and the National Science Foundation (NSF) on the effects of developing and using performance assessments on

teaching and learning in precollege and college mathematics classrooms/courses. She was also an inaugural member of the Board of Directors of the Howard University Middle School of Mathematics and Science.

Response from Hughes

I am deeply honored and humbled to be selected to receive the 2026 Louise Hay Award for Contributions to Mathematics Education. I read the responses of all of the previous winners and was moved by the pattern or theme of expressions of thankfulness and gratitude to others who had given support, noticed an interest or talent and helped to develop it, or was available to just listen when the nominee needed to be heard.

I, too, am thankful and grateful to many individuals who made it possible for me to even be considered for this award. I begin by thanking my parents, Dr. Gerald C. and Mrs. Myrtis E. Burke, for providing a warm, loving, and nurturing family and home environment for my siblings and me. Both of my parents were outstanding public school teachers. My mother taught reading and writing and my father taught mathematics and science. During my high school years, they always made sure that during the summer, I attended a residential institute to explore mathematical concepts and topics that probably would not be discussed in my classes during the regular school year—topics like transfinite numbers and actuarial science.

I am also grateful to all of my teachers in elementary, junior, and high school—too many to name—who were like other “mothers” and “fathers” and contributed greatly to my growth, development, and maturity during my formative years. They held high expectations for my classmates and me which, in turn, contributed to my high sense of self-efficacy while satisfactorily completing my undergraduate and master’s degrees in mathematics at the University of Rhode Island and the University of Maryland, College Park, respectively, in the early 1970s.

While completing my degree requirements at the University of Maryland, I received a call from the chairman of the Department of Mathematics at Howard University, Dr. James Donaldson, who offered me a position as a mathematics instructor in the newly created Center for Academic Reinforcement (CAR). I was recommended to him by Dr. Adeniran Adeboye, a dear friend and brilliant mathematician, who had just received his PhD in mathematics from Johns Hopkins University. I am eternally grateful and indebted to James and Adeniran for giving me my first opportunity to have a full-time job teaching mathematics. An added benefit was that I learned to cultivate a disposition of empathy, especially toward underserved students engaged in learning mathematics.

While teaching mathematics in CAR and the Department of Mathematics, I began to inquire about where on campus could I learn more about “how people learn.” I was drawn to the Department of Human Development & Psychoeducational Studies in the School of Education. There was a professor in the department, Dr. Sylvia Taylor Johnson, who took notice of me. Years earlier, she had received an undergraduate degree in mathematics from Howard, and a PhD in educational measurement and statistics from the University of Iowa. We were a perfect match—she was my mentor and I was her protégé. It was Sylvia who introduced me to the educational

assessment and measurement community. She was my advisor for my doctoral dissertation which examined differential item functioning (DIF) on the SAT; and with her connections, she put me in touch with research scientists and staff who (according to the acknowledgment page of my dissertation) were from “the Statistical Analysis Division of the College Board at the Educational Testing Service (ETS).”

Almost immediately after I successfully defended my dissertation, I received invitations to serve on technical advisory committees (TACs) for state educational assessment systems. A few years later, I was appointed assistant professor/mathematics educator in the Department of Curriculum and Instruction at Howard; therefore, I transitioned from teaching mathematics courses to teaching mathematics pedagogy courses to preservice teachers. I also developed a course titled, *Introduction to Assessment and Measurement in Teaching*. An important purpose of the course was to highlight the interdependence of teaching, learning, and assessment. Consequently, when preservice teachers in the pedagogy course developed lesson plans for their mathematics instruction, those plans had to include a proposed assessment plan which provided details about the types of assessments the teacher would use before, during, and after instruction. The purpose of the assessments is to provide feedback about student learning, often in real-time, so that instruction can be adjusted when necessary. Dr. Sylvia Taylor Johnson called these types of assessments, “instructments.” Obviously, her influence on my professional development and advancement is immeasurable.

There are other individuals in the fields of mathematics education, mathematics, educational psychology, and educational measurement to whom I am eternally grateful for their interest in and support of me; thus, making it possible for me to even be considered for the Louise Hay Award—let alone be selected. Those individuals include: My late father, Dr. Gerald C. Burke, the quintessential mathematics educator who left an administrative position at the district level to teach me and my classmates mathematics throughout our high school years; Drs. Jason Zimba, Phil Daro, and Lorrie Shepard (my nominators); and Drs. Edmund W. Gordon and Peggy Carr (my mentors in educational psychology and educational measurement).

Lastly, and most notably, I am profoundly grateful and indebted to my late husband, Henry “Randy” Hughes Jr., and my children Randy, Jacob, David, and Tamara—all of whom are grown now—for their love, patience, understanding, and support as we made this beautiful educational journey together over the almost past fifty years.

Established in 1991, the Louise Hay Award recognizes outstanding achievements in any area of mathematics education. Louise Hay was widely recognized for her contributions to mathematical logic, for her strong leadership as head of the Department of Mathematics, Statistics, and Computer Science at the University of Illinois at Chicago, for her devotion to students, and for her lifelong commitment to nurturing the talent of young women and men. The annual presentation of this award is intended to highlight the importance of mathematics education and to evoke the memory of all that Hay exemplified as a teacher, scholar, administrator, and human being. It will be presented at the Joint Mathematics Meetings, scheduled for January 4–7, 2026 in Washington, DC.

AWM Honors Anant P. Godbole with the M. Gweneth Humphreys Award for Mentoring

*The Association for Women in Mathematics is pleased to announce that the 2026 M. Gweneth Humphreys Award will be presented at the Joint Mathematics Meetings to **Anant P. Godbole**, professor emeritus of mathematics and statistics, East Tennessee University, and adjunct faculty in the Department of Mathematical Sciences at High Point University, for his significant and lasting contributions in mentoring and for his impact on the mathematics community.*

Citation

Dr. Anant P. Godbole's mentoring legacy spans over thirty years, marked by numerous moments of lasting impact that carry forward through his students into their own work. Dr. Godbole served as a professor of mathematics at Michigan Technological University (MTU) from 1984 to 2000. From 2000 until 2023, Dr. Godbole served as a professor of Mathematics and Statistics at East Tennessee State University (ETSU). During his career Dr. Godbole also served as the chair of the Department of Math and Statistics at ETSU (2000–2011) and as the executive director of the Center of Excellence in Math/Science Education (2014–2021). He has been honored throughout his career as a distinguished researcher and a distinguished teacher numerous times at both Michigan Tech and ETSU, beginning with winning the inaugural Department of Mathematical Sciences Teaching award from Michigan Tech in 1990 and most recently being awarded the Mathematics Department Distinguished Teaching Award from ETSU in 2012.

Dr. Godbole began a Research Experiences for Undergraduates (REU) program in 1991 at Michigan Tech that he ran nearly continuously (moving the program to ETSU in 2000) until 2016. Beginning in 2019 he continued with the REU as a co-principal investigator, transitioning to senior personnel in 2022. Over the course of his REU mentorship, 128 female undergraduate students participated in mathematics research under his guidance, which led to over 60 papers with or by those students. Many of those students have gone on to complete PhDs in mathematics and are serving as faculty and administrators across the country, including positions at Amherst College, Brown University, Cornell University, Georgia Tech, and Stanford University. Dr. Godbole's method and approach to REU mentoring became a model for many. Dr. Yan Zhuang, an associate professor in the Department of Mathematics and Computer Science at Davidson College, and member of the 2012 REU cohort, said that "when difficult situations arise, I quite literally find myself asking 'What would Anant do?'"

Dr. Godbole has consistently demonstrated a passion for inclusiveness in mathematics, stating in "Traditional Roots, New Beginnings: Transitions in Undergraduate Research in Mathematics



Anant P. Godbole

at ETSU" in the *Proceedings of the 2006 Conference on Promoting Undergraduate Research in Mathematics* that "I have begun to believe that undergraduate research is appropriate for all math majors, regardless of their ability, and that it should not be confined only to select students such as those in honors programs." He further stated that undergraduate research experiences should be available to "the students most likely to experience long-term impact from summer experience."

Long-term impact is a theme in letters from many of his former students. Isabel Byrne (currently a PhD student, 2021 REU cohort) noted that "seven of ten students [in her research group] were female which was a unique experience for me" and that "Dr. Godbole's support did not end with my REU. [...] He continued to stay in touch and check on my progress. I would not be where I am today without his commitment and support." Similarly, Daphne Skipper (PhD, associate professor of mathematics, US Naval Academy, 1993 REU Cohort) said "[t]here were four women and two men in our REU cohort—a gender balance that I didn't fully appreciate at the time, but now realize was pretty special. [...] It's hard to say exactly how my career would have been different without Anant's REU program, but it is safe to say that each of the phases, graduate school and then progressing in academia, would have been more difficult." Jessica Sidman (Brian E. Boyle Professor in Mathematics and Computer Science at Amherst College, 1996 REU cohort) said "[w]hat I learned from Anant's example of mentorship continues to influence me in my work with students today."

Having recently retired from full-time teaching, Dr. Godbole plans to continue engaging undergraduates in research as well

as to revisit some of the unpublished work from his years as an REU mentor. Dr. Godbole's efforts in nurturing the next generation of mathematicians will manifest well beyond his own students. The AWM is pleased to honor Dr. Godbole for his significant and lasting contributions in mentoring and for his impact on the mathematics community.

Response from Anant P. Godbole

It is indeed a great honor to be selected as the recipient of AWM's Gweneth Humphreys Award for the mentorship of undergraduate women. I would like to deeply thank my nominators and the students who wrote letters of support. I thank the Award Committee for selecting me.

It is very gratifying to see how far my students, from both MTU and ETSU, and from the REUs held at these schools between 1991 and 2021, have gone, and how successful they have been.

I began teaching in 1984, was tenured in 1990, and gained full professorship in 1994. These are coincidentally the years that my three daughters (Ramona, Maya, and Leena) were born. My wife Kalpana, and our three daughters, were the women who lived and grew through the REU adventure, offering support, curiosity, and praise at all times. I recall Ramona being in awe of one of the women in my 1996 REU cohort, later befriending her. As the

years went by, all three of the girls said "Dad, I am older than your REU students!"

My professional career has been intertwined with those of my students. A vast majority of my papers have been with my undergraduate students, particularly from the REU. Several other papers, authored by student teams, have also been influenced by my support. As a professor and administrator at two non-PhD-granting schools (MTU began offering the PhD after I left), I soon found myself living my life vicariously through the successes of my students. Thank you all so much!

This award is named for M. Gweneth Humphreys (1911–2006). Professor Humphreys earned her masters degree from Smith College and her PhD at age 23 from the University of Chicago in 1935. She taught mathematics to women for her entire career, at Mount St. Scholastica College, H. Sophie Newcomb Memorial College, and finally for over thirty years at Randolph-Macon Woman's College. This award, funded by contributions from her former students and colleagues at Randolph-Macon Woman's College, recognizes her commitment to and her profound influence on undergraduate students of mathematics. It will be presented at the Joint Mathematics Meetings, scheduled for January 4–7, 2026 in Washington, DC.

NSF-AWM Mentoring Travel Grants for Women

Mathematics Mentoring Grants. The objective of the NSF-AWM Mathematics Mentoring Travel Grants is to help junior women to develop long-term working and mentoring relationships with senior mathematicians. This relationship should help the junior mathematicians to establish their research programs and eventually receive tenure. Each grant funds travel, accommodations, and other required expenses for an untenured woman mathematician to travel to an institute or a department to do research with a specified individual for one month. The applicant's and mentor's research must be in a field which is supported by the Division of Mathematical Sciences of the National Science Foundation.

Selection Procedure. All awards will be determined on a competitive basis by a selection panel consisting of distinguished mathematicians appointed by the AWM. A maximum of \$5000 per award will be funded.

Eligibility and Applications. Please see the website (<https://awm-math.org/awards/awm-grants/travel-grants/>) for details on eligibility and do not hesitate to contact us at awm@awm-math.org or 401-455-4042 for guidance. Applications from members of underrepresented minorities are especially welcome.

Deadline. There are now two award periods per year. Applications are **February 15 and August 15**.

Sarah Peluse to be Awarded the 2026 AWM–Microsoft Research Prize

*AWM will present the sixth AWM–Microsoft Research Prize in Algebra and Number Theory to **Sarah Peluse**, associate professor of mathematics at Stanford University, in recognition of breakthrough results, creative methods, and uncommon breadth of research in number theory, combinatorics, ergodic theory and representation theory.*

Citation

Although **Sarah Peluse** is only in her sixth year past PhD, her work has already had a great impact. Peluse is known for exceptional research in several different fields: number theory, combinatorics, ergodic theory, and representation theory. Her breakthrough results, creative methods, and uncommon breadth make her most worthy of the 2026 AWM–Microsoft Research Prize in Algebra and Number Theory. Her nominators say that “It is truly remarkable how much Peluse has accomplished in such a short span of time, and she continues to be enormously prolific, creative, and original.”

In the challenging area of additive combinatorics, Peluse obtained breakthrough quantitative results on polynomial progressions in dense sets of integers, generalizing Gowers’ work on arithmetic progressions. In this work, joint with Prendiville, she answered a notorious open problem and developed new tools which have since been used widely in the field by herself and others.

In another area, Peluse and coauthors Greenfeld and Iliopoulou introduced new methods from number theory and algebraic geometry to achieve striking results on the combinatorial geometry of sets of points at integer distances, essentially obtaining the optimal diameter.

Peluse has also established remarkable results in the representation theory of symmetric groups: in two papers, one solo and one with Soundararajan, she proved a conjecture of Miller on the divisibility of character values using probabilistic and combinatorial techniques.

Peluse was recently hired with tenure at Stanford University, after postdoctoral positions at University of Oxford and the Institute for Advanced Study and Princeton University and a tenure track position at University of Michigan. She earned a PhD in 2019 from Stanford University under Soundararajan. Her research has been recognized by a Sloan Research Fellowship, a Maryam Mirzakhani New Frontiers Prize, a Dénes König Prize, and a Salem Prize.

According to one expert “Peluse is one of the strongest young mathematicians in the fields I am active in... She is already a leader in the field of additive combinatorics, and likely will be so in other nearby fields soon.” Another states “I expect her to continue her astonishing upward trajectory, and don’t see any limit to what she can achieve.”



Sarah Peluse

Photo © Dan Komoda, Institute for Advanced Study

Response from Sarah Peluse

I am honored to receive the 2026 AWM–Microsoft Research Prize in Algebra and Number Theory. I’ve been very fortunate to have many amazing mentors, and want to express particular appreciation for Paul Sally, Kannan Soundararajan, Ben Green, and Peter Sarnak. I have also had a great time doing math with all of my wonderful collaborators: Sean Prendiville, Kannan Soundararajan, Rachel Greenfeld, Marina Iliopoulou, Ashwin Sah, Mehtaab Sawhney, Ben Krause, Mariusz Mirek, Jim Wright, Dariusz Kosz, and Fernando Shao. Finally, I would like to thank the National Science Foundation for its immense support at every stage of my career.

Established in 2012, the biennial presentation of this prize serves to highlight to the community outstanding contributions by women in the field of algebra and number theory, and to advance the careers of the prize recipients. This award is made possible by a generous contribution from Microsoft Research. It will be presented at the Joint Mathematics Meetings, scheduled for January 4–7, 2026 in Washington, DC.

Hong Wang to Be Awarded the 2026 AWM–Sadosky Research Prize

The Association for Women in Mathematics is pleased to announce that the 2026 AWM–Sadosky Research Prize in Analysis is awarded to **Hong Wang**, associate professor of mathematics at New York University's Courant Institute of Mathematical Sciences and permanent professor of mathematics at Institut des Hautes Études Scientifiques (IHES). Hong Wang is recognized for solving central problems in harmonic analysis through the introduction of ground-breaking ideas. In particular, for substantial contributions to the Fourier restriction problem, the Kakeya conjecture, and geometric measure theory.

Citation

The 2026 AWM–Sadosky Research Prize in Analysis is awarded to **Hong Wang** for her transformative work in harmonic analysis, solving central problems through the introduction of ground-breaking ideas, particularly, for her substantial contributions to the Fourier restriction problem, the Kakeya conjecture, and geometric measure theory, in general.

Wang's work exposes deep connections between the areas of Fourier restriction and geometric measure theory. Wang's contributions include the recent resolution of one of the main conjectures in geometric measure theory, known as the Furstenberg set conjecture in the plane; the introduction and development of the high-low method, together with its application to the resolution of the local smoothing conjecture for the wave equation in two spatial dimensions; refinements of the polynomial method that have led to new estimates in the restriction conjecture; qualitative progress on the Kakeya conjecture in \mathbb{R}^3 .

Yet at an early career stage, the quality and quantity of Wang's publications in top journals, including the *Annals of Math*, *Inventiones*, *GAFA*, *Duke*, *JEMS* and *AJM*, as well as her work in progress, are quite impressive. Her work places her among the top leaders in some of the most influential areas of Fourier analysis and geometric measure.

Response from Hong Wang

I'm greatly honored to receive the AMS–Sadosky Prize in Analysis. I am deeply grateful to my PhD advisor, Larry Guth, for his guidance and support, and for teaching me to think systemati-



Hong Wang

Photo © Chris Peus/IHES

cally about research problems and to develop a sense of mathematical taste. I have also been fortunate to have supportive mentors throughout my career, including Peter Sarnak, Yvan Martel, Emmanuel Breuillard, and József Solymosi. Finally, I would also like to thank all my collaborators and colleagues for their generosity and stimulating conversations.

Established in 2012, the AWM Sadosky Research Prize recognizes exceptional research in analysis by a woman early in her career. The award is named for Cora Sadosky, a former president of AWM, and is made possible by generous contributions from Cora's husband Daniel J. Goldstein, daughter Cora Sol Goldstein, and friends Judy and Paul S. Green and Concepción Ballester. The 2026 award will be presented at the Joint Mathematics Meetings, scheduled for January 4–7, 2026 in Washington, DC.

Matthew Krauel to Receive 2026 AWM Service Award

*The Association for Women in Mathematics (AWM) is pleased to announce that a 2026 AWM Service Award will be presented to **Matthew Krauel**, associate professor of mathematics, California State University, Sacramento. Krauel is being recognized for his leadership of the AWM-Joint Mathematics Meetings (JMM) Organizing Committee, beginning as poster judge, continuing as poster judging coordinator, and finally moving into the role of committee chair.*

Citation

Matthew Krauel agreed to serve as poster judging coordinator in February of 2021 and continued in this position through the end of January 2024. In his first year, Krauel recruited judges, assigned judges to posters, created evaluation rubrics, and helped develop a meaningful mentoring component for an event to be held in January in Seattle. Late in the year, Covid-19 reemerged and the conference was held as a virtual event in April. Krauel was instrumental in making this less-than-ideal experience meaningful. Poster session participants met twice with the organizers prior to the JMM in order to discuss best practices for poster presentations and strategies to make the best out of their JMM experience. Adapting to the virtual setting of the meetings, poster presenters prepared prerecorded presentations to accompany their posters. Graduate student participants formed peer teams of three, with the goal of providing each other with feedback while preparing the video-recorded presentations. Judges were able to view the presentation materials, score the posters, and provide feedback at a more leisurely pace.

The judging group then came together virtually to collaboratively decide on the winners. At a virtual reception the graduate students presented summaries of their posters to the JMM audience.

In 2023, the AWM Workshop and poster session took place in Boston. Krauel was on hand to make sure that all of the prearranging he had done went without a hitch and the winners were announced and presented with certificates before the reception ended. Under Krauel's leadership, a more formal mentoring component, in which mentees were assigned tables according to discussion topics, was initiated in San Francisco, in 2024.

In 2024, Krauel stepped up to chair the AWM-JMM Committee and helped organize all AWM activities at JMM 2025 in Seattle and JMM 2026 in Washington, DC. This was a crucial role in these years as the workshop doubled in size from being organized by one Research Network to being organized by two. Krauel made sure that all of the pieces fell into place and that the organizing committee was on track for successful events.

Matthew Krauel is an asset to the AWM. He is a creative, flexible, organized, responsive, and extremely competent leader.

The AWM Service Award, established by the AWM Executive Committee in November 2012, recognizes individuals for helping to promote and support women in mathematics through exceptional voluntary service to the Association for Women in Mathematics.

The award is given annually to a select AWM Volunteer or group of AWM volunteers in recognition of their extensive time and effort devoted to AWM activities. This award will be presented at JMM 2026 during the AWM Reception and Awards Presentation Tuesday, 5:00 p.m.–6:30 p.m., Marquis Salon 5, Marriott Marquis, Washington, DC.

Betsy Stovall to Receive 2026 AWM Service Award

*The Association for Women in Mathematics is pleased to announce that a 2026 AWM Service Award will be presented to **Betsy Stovall**, University of Wisconsin-Madison professor of mathematics, Letters and Science Mary Herman Rubinstein Professor, and AMS Associate Secretary for the Central Section. Stovall is being recognized for spearheading the local organizing efforts to create a spectacular 2025 AWM Research Symposium in Madison.*

Citation

The AWM Research Symposia rely heavily on having a local organizing committee that is thoughtful and willing to do the necessary legwork of putting all the pieces in place and making sure that the environment is welcoming and functions well. UW-Madison hosted the largest symposium to date with over 70 special sessions and around 400 guests. Early in 2024, **Betsy Stovall** secured support from the Mathematics Department. She then enlisted her colleagues and students as volunteers throughout the planning and execution of this research symposium.

Stovall not only made sure that AWM had appropriate spaces and audio-visual equipment for special sessions, poster sessions, panels, roundtables, and plenary lectures; she negotiated hotel space; organized venues, food, and audio-visual equipment for two receptions, a banquet and two ice cream socials. She met with sponsors and AWM staff to review the set-up and she was an important member of the scientific planning committee. She did everything calmly and efficiently. From an observer's point of view, it was an organizational miracle and not a single thing went wrong...even a flood in the bathroom magically disappeared when Stovall showed up.

To quote one of the symposium participants, "...The welcoming environment, the rich array of research that was presented at a level that was largely understandable to a broad



Betsy Stovall

audience, and the wonderful people who did so much to make this happen make this a conference I would recommend to all mathematicians at all levels. Thank you!"

Stovall did all of this while also serving as Associate Secretary for the Central Section of the American Mathematical Society, advising several PhD students, and maintaining an active research program in harmonic analysis.

The AWM Service Award, established by the AWM Executive Committee in November 2012, recognizes individuals for helping to promote and support women in mathematics through exceptional voluntary service to the Association for Women in Mathematics. The award is given annually to a select AWM Volunteer or group of AWM volunteers in recognition of their extensive time and effort devoted to AWM activities. This award will be presented at JMM 2026 during the AWM Reception and Awards Presentation Tuesday, January 6, 5:00 p.m.–6:30 p.m., Marquis Salon 5, Marriott Marquis, Washington, DC.

MEDIA COLUMN

Media Column Editors: Sarah J. Greenwald, Appalachian State University, appalachianawm@appstate.edu, and Alice Silverberg, University of California, Irvine, asilverb@uci.edu

Marguerite's theorem: real and imaginary cinematographic equations

Marguerite Hoffmann is the fictional mathematician of the 2023 French-Swiss film *Le Théorème de Marguerite*, from the film director and screenwriter Anna Novion. She is interviewed by her real accomplice, friend of the screenwriter and consultant for the film Ariane Mézard, a professor of mathematics at Institut de Mathématiques de Jussieu, Paris, Rive Gauche, Sorbonne University, France.

AM: Dr. Hoffmann, thank you for having us. Can you tell us about the genesis of this film? How did it all begin?

MH: Please call me Marguerite. It all started with a misunderstanding. Anna Novion, the director, was looking for an allegory to evoke a personal experience: the feeling of freedom and disconnect she felt when, as a young adult emerging from a long convalescence, she was able to return to a normal life. For her, the sudden abandonment of the ascetic life imposed by a PhD illustrated a similar break: the abrupt shift from an internalized existence to a confrontation with the real world.

She first met with PhD students in literature at the ENS¹, but they didn't fit the profile she imagined; they were too grounded in the world. Funnily enough, they were the ones who pointed her toward the mathematics department. Anna then met the students and professors of the DMA², and one day, she created me to be like the people she encountered. She made me answer her through others. A sincere and true dialogue was immediately established. We were fascinated by each other's worlds, so close in their demands and yet so different in their expression. It was the discovery of new forms of freedom.

AM: So, is the film a documentary about mathematical research?

MH: From my very first meeting with Anna, I was mindful of the importance of using the exceptional public exposure the film offered to shine a light on mathematics. I wanted the film to

show real, living mathematics: a real lecture on the prime number theorem of Hadamard and de la Vallée Poussin; real drafts, a thesis manuscript in number theory, and even a research presentation at the Institut Henri Poincaré on a theorem by Gowers.

But no, Anna's film is not a wildlife documentary about mathematicians! Writing a screenplay is an artistic act. I recognize my world in it; the sets are real—the cafeteria, the Cour aux Ernest (a courtyard at the ENS), my *thurne*³...—and the school's fanfare and many of my classmates and professors are extras. However, there is also a lot of imagination. And I must say: there was no mistake in my thesis. In fact, there are no errors in any of the mathematical writings that appear on screen, except perhaps in the last five minutes, which give way to fiction.

Anna depicted us as she saw us. I don't wear slippers at school, but I have friends who still do. Her magic lies in her mastery of time. You see me working a lot, but you, as mathematicians, know that we have to work even more. It would be a lie to suggest I'm some extraterrestrial genius. It's a marathon runner's work. Anna knew how to capture and convey the multitude of contradictory, silent, and intense feelings we face, and to make that universal.

AM: Can you tell us more about the mathematics that appear in the film?

MH: It was Anna who chose the Goldbach conjecture. I told her it wasn't realistic for a thesis. I told her I was working on other magnificent theorems from analytic number theory whose statements are accessible to an attentive but nonexpert audience (Szemerédi, Green-Tao, Chen...), all while following the film's plot. I adapted to her requirements: a technical word, an intelligible sentence, an emotion. ... I had to deal with unexpected resistance: Szemerédi's name was considered difficult to pronounce, and Chen's theorem was "too old" for the final scene (!). Everything worked out in the end: I read an interview with Endre Szemerédi⁴ when the film, *Marguerite, a számok szerelmese*, was released in Hungary, and he didn't complain about the pronunciation of his name... and Chen's theorem appearing on the walls of my apartment was an opportunity to bring up the parity problem.

The biggest challenge was realism. Who can say what mathematics will solve Goldbach? Anna didn't film my entire final proof, but you can still spot some essential elements. For example, James Maynard's name appears just before the final statement, and we didn't know at the time that he would be awarded the Fields Medal. I also conscientiously cited my sources: names of mathematicians on the blackboards, Terence Tao's blog on a screen, a constant from the Green and Tao paper⁵... I thought I'd be the only one

³ Student housing for ENS students

⁴ <https://www.magyarhirlap.hu/kultura/20240526-a-szemeredi-tetel-egy-francia-filmben>

⁵ "A bound for progressions of length k in the primes," 2004, Available from <http://people.maths.ox.ac.uk/greenbj/papers/back-of-an-envelope.pdf>

¹ École Normale Supérieure de Paris Sciences et Lettres

² Department of Mathematics and Applications

to know, but some sharp-eyed viewers⁶ have already analyzed my boards and recognized other references, even one to *The Hitchhiker's Guide to the Galaxy*.

Ultimately, Anna made mathematics a character in its own right: with its voice—the sound of the chalk, which evolves from harsh to soft—its discreet or overwhelming presence, and its interactions that source multiple emotions. The equations were even made up to appear fluorescent at night in my room. The mathematics are beautiful; Anna captured them as if they were paintings. In the end, they share the movie poster with me.

AM: And what about your encounter with your “double,” actress Ella Rumpf?

MH: It was an immense joy. I discovered the “acting method.” Ella immersed herself in life at the ENS to understand me. She, who refuses to be the face of major brands, wore a hoodie and blended in with the *normaliens* (ENS students). We worked for months on Szemerédi’s theorem. While filming *Northern Comfort* in Reykjavík, Ella would write lines of mathematics with a fountain pen in the evening, all while playing Coco, an eccentric media influencer. Her ability to appropriate the language of mathematics to express her own is remarkable.

Together with Anna, they analyzed and reinvented me. I witnessed a metamorphosis. While I was Anna’s imaginary creation, I became incarnate through Ella. She brought me to life by understanding that mathematics could have helped her, as a child, to tame her doubts, her anxiety about the infinite. She is a great, polymorphous, and genuine actress.

⁶El Jj YouTube video “Elle démontre la conjecture de Goldbach,” <https://www.youtube.com/watch?v=2MdIEpmOXms>

AM: Your journey raises important questions about the culture of mathematical research, especially for women. Do you feel your experience would have been different if you had been a man?

MH: I never wanted to be “the woman mathematician.” I wanted to be a mathematician. But it’s undeniable that the isolation I felt, the pressure to be infallible, were exacerbated by being the only woman in my class. Some people criticized my austere appearance, but I was just trying to hide among the others. Mathematics has always protected me, but I think that during my thesis, the shell became a prison. My sense of difference and loneliness were also exacerbated by my social origins. I come from a modest social background and grew up in a small provincial town. My escape was also an escape from those burdens. My collaboration with Lucas Savelli was a revelation in that respect. He didn’t see a “woman who does math;” he saw an intellectual partner. It was a relationship of pure mathematical equality.

AM: And since the film’s release?

MH: The film has had an incredible journey: a selection at Cannes, the 2024 César for Most Promising Actress for Ella, and distribution in more than 25 countries on all continents... I accompanied the team for the first few months, which was a very positive experience of large-scale public outreach. The film sparks fruitful discussions on personal commitment, resilience, mathematical research, the lack of diversity, and bullying....

Since 2025, I’ve stopped responding to these requests. Anna and Ella have created and embodied other characters. The film is living its own life and finding far better mediators than me. I went back to being just an imaginary mathematician (I remain fascinated by Nicolas Bourbaki...) It wasn’t without risk, as such exposure can discredit you.

AWM at the 2025 SIAM Annual Meeting

Jamie Haddock (Harvey Mudd College), Anna Little (University of Utah)

The SIAM Annual Meeting was held in Montréal, Québec, Canada from July 28–August 1, 2025. As part of this conference, AWM hosted a series of events during the two-day AWM Workshop held July 28–29. This workshop was supported by AWM individual and institutional member dues and was made possible through the generosity of AWM donors and sponsors.

The **2025 AWM Workshop** was organised by the Women in the Science of Data and Mathematics (WiSDM) Research Network. Researchers in this network are broadly interested in problems motivated by working with real world data. Topics of particular interest recently have included variational and deep-learning models for image processing and computer vision, randomized iterative methods for tensor decomposition and regression problems, applications of optimal transport within biological data, and robust manifold estimation. The WiSDM Research Network has held four research collaboration workshops. The first two were held at the Institute for Computational and Experimental Research in Mathematics (ICERM) in 2017 and 2019, the third at the Institute for Pure and Applied Mathematics (IPAM) in 2023, and the fourth—“Workshop in the Science of Data and Mathematics”—was held in August 2025 at the University of North Carolina at Chapel Hill.

The AWM Workshop provided an opportunity for community building among participants across career stages and all research areas in applied and computational mathematics. The workshop began on Monday with a two-part minisymposium featuring several speakers from the 2023 WiSDM Research Workshop at IPAM. Between the two minisymposia sessions, participants



attended a mentoring luncheon where each student or postdoc participant met with their paired mentor, and the AWM–SIAM Sonia Kovalevsky Lecture by Yongjie Jessica Zhang (Carnegie Mellon University). On Tuesday, the workshop featured a panel discussion with four mathematicians at a variety of career stages who shared their thoughts regarding networking and building community, navigating the job market, getting tenure and promotion, imposter syndrome, and choosing careers in industry or academia. The workshop concluded Tuesday night with a minisymposium in which graduate students and postdoctoral fellows presented their research and received feedback from mentor-judges.

The **AWM minisymposium** for graduate students and recent PhD recipients was very successful, and the room was full of exciting research. We are especially grateful to the poster judges who generously shared their time and expertise to evaluate and advise the poster presenters. The AWM poster presenters were:

- **Patricia O. Azike** (Boise State University), *Modeling the Effect of Vector Control on the Host Population in the Eradication of Malaria*
- **Michelle Baker** (University of Florida), *Applying Acceleration to Krylov Subspace Eigenvalue Solvers*





- **Dipanwita Bose** (*University of Houston*), *Maximum Likelihood Estimator of Markov Processes with Censored Data for the Ehrenfest Model and Beyond*
- **Allison Cruikshank** (*Duke University*), *Oxidative Stress Management in the Liver: Elucidating Sex Differences and Disease Pathologies*
- **Abigail R. Drumm** (*Worcester Polytechnic Institute*), *Monte Carlo Simulations to Model Flux Decline in Dead-End Microfiltration Operations*
- **Rui Fang** (*University of Pittsburgh*), *Adaptive Parameter Selection in Nudging Based Data Assimilation*
- **Megan J. Hirni** (*University of Missouri*), *DDA: An R Package for Learning Causal Structures in Observational Data Using Direction Dependence Analysis*
- **Jessica Kingsley** (*University of Tennessee, Knoxville*), *Modeling Metastatic Cancer Treatment with Neoantigen Peptide Vaccine*
- **Yanfei Qu** (*McGill University*), *The Effects of Air Pollution on Health: A Longitudinal Study of Los Angeles County Accounting for Measurement Error*
- **Alexa Shreeve** (*Rochester Institute of Technology*), *Joint Denoising and Sparse Identification for Nonlinear Dynamical Systems*
- **Farjana Siddiqua** (*Georgia Institute of Technology*), *Data Assimilation with Model Errors*
- **Savannah Williams** (*Bryn Mawr College*), *Mathematical Models of Ovulation: A Parameter Sensitivity Analysis*
- **Mushal Zia** (*Michigan State University*), *Persistent Directed Flag Laplacian (PDL)-Based Machine Learning for Protein–Ligand Binding Affinity Prediction*

We congratulate all of the poster presenters and especially highlight the following participants who received the poster prize or honorable mention after the conclusion of the AWM Workshop based on judge feedback and scores:

- **Alexa Shreeve** (*Rochester Institute of Technology*)—poster prize
- **Dipanwita Bose** (*University of Houston*)—honorable mention
- **Allison Cruikshank** (*Duke University*)—honorable mention
- **Jessica Kingsley** (*University of Tennessee, Knoxville*)—honorable mention

Special thanks to all of our AWM poster judges: Longxiu Huang (Michigan State University), Anna Konstorum (Institute for Defense Analyses), Yifei Lou (University of North Carolina at Chapel Hill), Aimee Maurais (Massachusetts Institute of Technology), Caroline Moosmueller (University of North Carolina at Chapel Hill), Namrata Nadagouda (Georgia Institute of Technology)

The **two-part AWM minisymposium** focused on topics in the mathematics of data science. The presentations in these sessions spanned a wide range of areas such as network science, data completion and imputation, manifold dimensionality reduction, active learning models, robust signal processing, and randomized iterative methods for regression. Specifically, the following mathematical scientists from the WiSDM Research Network shared their work in the two-part minisymposium:

- **Longxiu Huang** (*Michigan State University*), *Guaranteed Sampling Flexibility for Low-Tubal-Rank Tensor Completion*
- **Anna Konstorum** (*Institute for Defense Analyses*), *Application and Evaluation of a New Notion of Discrete Graph Curvature on Real-World Networks*
- **Harlin Lee** (*University of North Carolina at Chapel Hill*), *$O(k)$ -Equivariant Dimensionality Reduction on Stiefel Manifolds*
- **Anna Little** (*University of Utah*), *Functional Multi-Reference Alignment via Deconvolution*
- **Aimee Maurais** (*Massachusetts Institute of Technology*), *Identification of Paths for Dynamic t Transport via Mean-field Control*
- **Namrata Nadagouda** (*Georgia Institute of Technology*), *Active Query Synthesis for Preference Learning*
- **Sui Tang** (*University of California, Santa Barbara*), *Robust Estimation of Smooth Graph Signals from Randomized Space–time Samples*

continued on page 34

AWM AT 2025 SIAM ANNUAL MEETING

continued from page 33

- **Karamatou Yacoubou-Djima** (Wellesley College), *Randomized Kaczmarz Methods for T-Product Tensor Linear Systems with Factorized Operators*

The last day of the AWM Workshop featured a **panel on career advancement at all stages**. The panel was a highlight of the workshop, and we are grateful to our panellists for sharing their advice and to the audience members for actively engaging with questions. The four panellists were:

- **Yifei Lou** (University of North Carolina at Chapel Hill)
- **Tammy Kolda** (MathSci.ai)
- **Anna Konstorum** (Institute for Defense Analyses)
- **Caroline Moosmueller** (University of North Carolina at Chapel Hill)

We heard many useful pieces of advice at the panel, on topics including professional development, mentorship, funding opportunities, and achieving a healthy work-life balance. After the panel ended, many of the poster presenters remained in the room to speak to the panellists and ask more questions, continuing the conversation. It was clearly an active, engaging event that built community.

During the mentoring luncheon, AWM poster presenters and mentors were paired in small groups and had the opportunity to ask questions about the academic application process, obtaining industry positions and internships, working on interdisciplinary research, and other topics. All of the poster presenters, minisymposium speakers, panellists, and poster judges were invited to the luncheon, and the community was delighted to also interact with Jessica Zhang (AWM-SIAM Sonia Kovalevsky Lecturer), Darla Kremer (AWM Executive Director), Lakeshia Legette Jones (AWM Meetings Coordinator), and Raegan Higgins (AWM President).

Special thanks to all of those who served as mentors: Jamie Haddock (Harvey Mudd College), Longxiu Huang (Michigan State University), Anna Konstorum (Institute for Defense Analyses), Anna Little (University of Utah), Aimee Maurais (Massachusetts



Institute of Technology), Namrata Nadagouda (Georgia Institute of Technology), Sui Tang (University of California, Santa Barbara).

The Sonia Kovalevsky Lecture entitled From Neurological Disorders to Additive Manufacturing: Integrating Isogeometric Analysis with Deep Learning and Digital Twins was delivered by Jessica Zhang (Carnegie Mellon University) on Monday afternoon. The lecture was introduced by AWM President, Raegan Higgins and SIAM President, Carol Woodward.

The AWM Booth was located in the main reception area, where coffee breaks took place, and it served as a place to share information and promote opportunities for participation. It was also a place for community building, chatting with friends, and meeting new potential collaborators and mentors. We encourage you to stop by the AWM booth at all meetings, and to use it as a place to gather, share, and belong. Volunteering at the AWM booth offers a great opportunity to learn about AWM and meet AWM members.

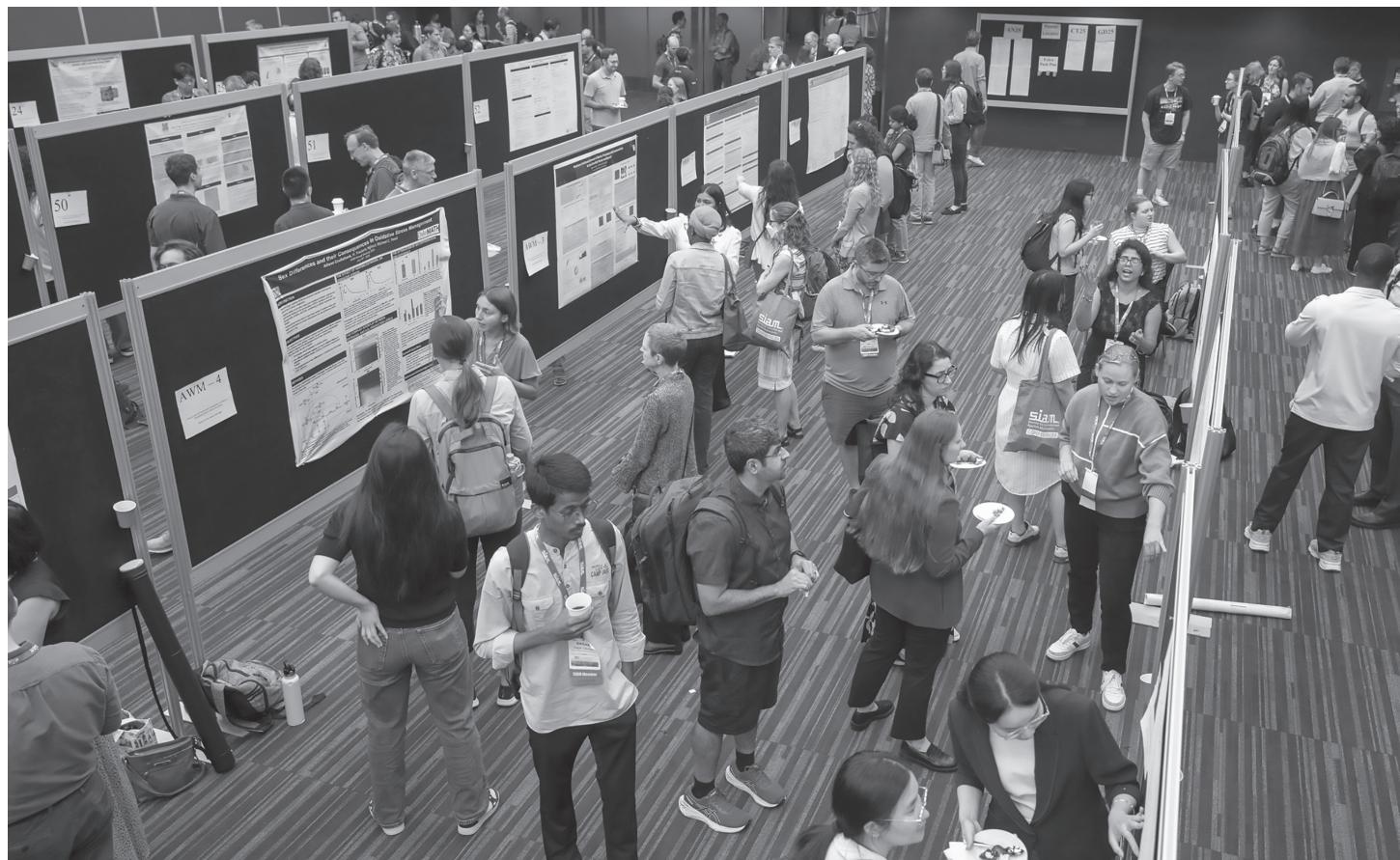
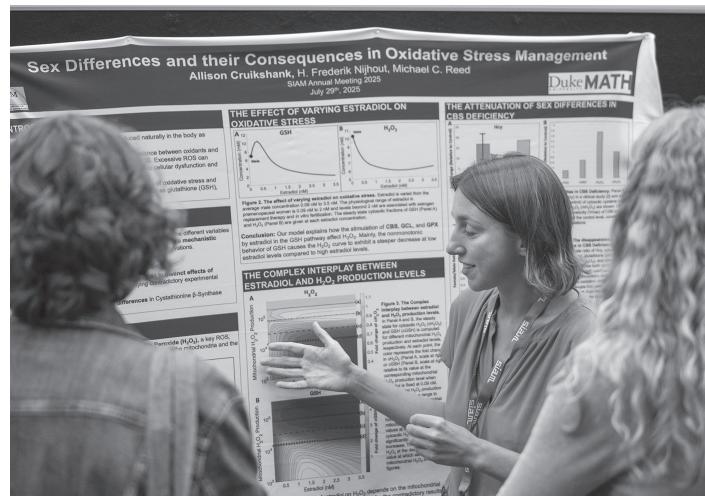
Special thanks to the members of the AWM SIAM Committee: Jamie Haddock (Harvey Mudd College), Darla Kremer (AWM), Lakeshia Legette Jones (Clark Atlanta University), Fengyan Li (Rensselaer Polytechnic Institute), Anna Little (University of Utah), Arnaja Mitra (University of Maryland), Jing-Mei Qiu (University of Delaware), Anna Zemlyanova (Kansas State

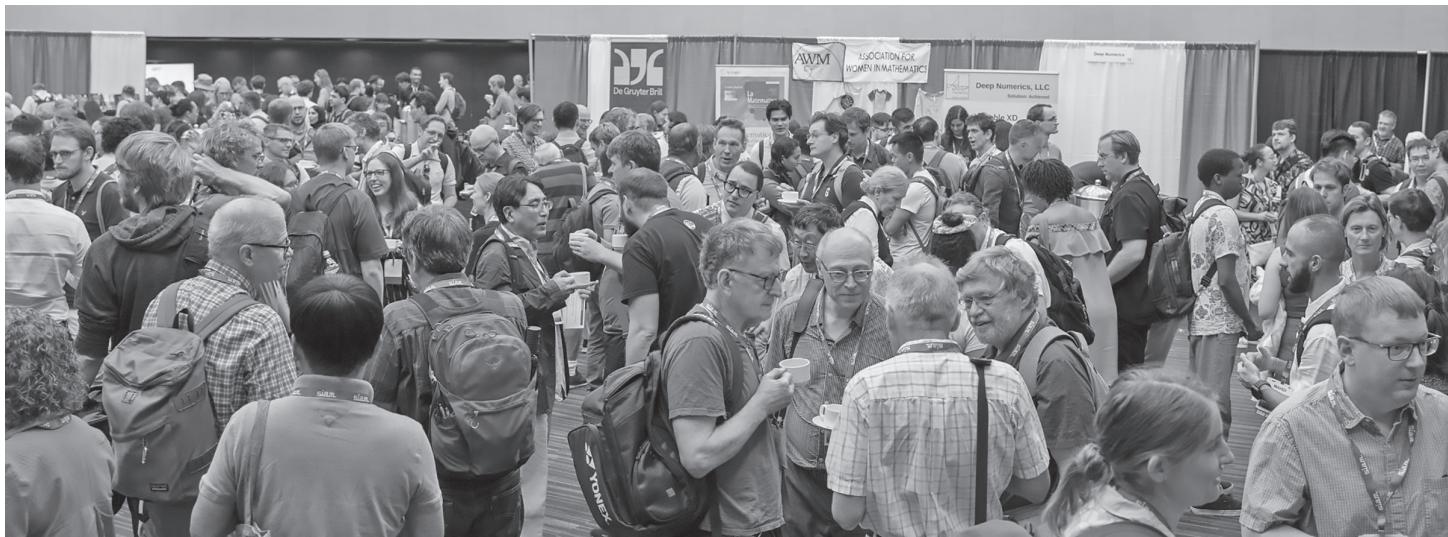


University), and Heather Zinn Brooks (Harvey Mudd College). We are grateful to the entire committee for contributing to the planning of AWM activities at the SIAM Annual Meeting, and we especially thank Noemi Petra (University of California, Merced), the prior committee chair, and Alexandria Volkening (Purdue University) for sharing many useful resources from their experiences organising the 2023 and 2024 AWM Workshops.

Thank you to all who made the 2025 AWM Workshop a success, and we encourage those interested in complex systems to join the Women in the Science of Data and Mathematics (WiSDM) Research Network.

Get Involved! AWM is a network of mathematicians who support women in the mathematical sciences, and all are welcome to join this community! To learn more about how to get involved with research groups, check out the AWM website (<https://awm-math.org/programs/research-networks/>). Don't see your research field? Consider starting a network. Do you attend SIAM conferences and are you interested in being a mentor or poster judge? Contact the AWM SIAM Committee chair. Social change doesn't just happen, and neither do the programs!





AWM AT 2025 SIAM ANNUAL MEETING



EDUCATION COLUMN

Education Column Editor: Jackie Dewar, Loyola Marymount University, jdewar@lmu.edu

Sabbatical reflections about sabbaticals—real or desired

Guadalupe (Guada) Lozano¹, guada@arizona.edu

Two years ago, my colleague and bandmate Colin Blakely took the first sabbatical of his 20-plus-year career. Colin, until recently professor of photography and director of the School of Art at the University of Arizona, told me: “I always felt like a sabbatical was a luxury; something to immerse yourself in when you were able to fulfill your other commitments. But then a dear friend and colleague observed, ‘How can you not take a sabbatical? What other way is there for you to reconnect with your humanity?’ Framed in this way, I immediately realized the need to reconnect with my own humanity for the benefit of all those around me.” The implication in the words and in the way Colin shared them was simple: we best serve those we touch—students, colleagues, places—by coming back to who we are, and that place in us that brought us to serve in the first place. I remember thanking Colin for sharing what felt to me like an affirming and generous insight into his inner, personal workings. “You are the first one to actually thank me for taking a sabbatical” he lightheartedly replied.

Colin’s perspective—in contrast to the sense of “I can’t take time off” many of us may feel—helps reaffirm why some of us choose to serve in academia: we believe in human causes larger than ourselves, and we keep our vision on *honoring them* through what we do and who we are... with patience and steadfastness, through thick and thin. Part of that honoring is taking time to reconnect to the “why we are where we are” and de-weed potentially unnoticed overgrowth around the seminal reasons that brought us to what we do.

On reconnecting to our calling

“The future is not later in time, but higher in consciousness.”

—Thomas Hübl²

My 2025 sabbatical started with a work trip to Bali, where I traveled as a faculty facilitator with CIELO,³ the University of

Arizona’s unique experiential travel abroad program. Bit by bit, during our ten-day culturally immersive, service-learning Bali life, I felt myself letting go of my own inner questioning about being there (“Do I belong here now? Shouldn’t I be starting my sabbatical writing instead?”). As I began to embrace the now of the experience just as it was, that awareness led to an epiphany. Being in Bali with CIELO was enabling the start of my sabbatical book writing. Not because it was informing place-based mathematics,⁴ but because it was bringing me to the mind and heart space needed for the writing voice I sought to offer. I realized that (as the Hübl quote suggests) my writing wasn’t being postponed to “later in time.” The words to be written were being birthed then, in real time through the “higher consciousness” afforded by the Bali experience.

And still, in the contexts many of us move in, urgency creeps and insights like the one above are seldom pondered. Upon my return from Bali, Judy Kiyama, a professor of higher education and also a dear friend and collaborator said to me: “Take the time you need. Don’t rush into the work. A sabbatical allows you no urgency; it gives you space to find yourself anew. That is what it’s there for.” Judy’s words twinkled as gentle lanterns over the path forward. As many of us know but may seldom practice, cultivating space to find ourselves anew is what blossoming and renewal depend on. Bowing to that practice is what Judy was validating. It’s also what Colin yielded to in choosing to go into the first sabbatical of his long and accomplished academic career.

Gently renouncing perceived urgencies (our own and other’s) and cultivating space for renewal are practices for daily living, whether our sabbaticals are real or desired. Renewal for some of us happens through being in relation to land and nature and sensing our collective oneness. When I arrived in Chelsea, MI to formally begin my sabbatical book writing, once again the urgency of engaging this task right away felt palpable—a certain automatic pressure for efficiency that forgets that words are best birthed when they flow from meaning and attunement to what wants to be written. So, I slowed and allowed myself space to arrive. Before I knew that land, place and oneness would be themes in my book, I spent three days at the lake house coming into the relationship with the land that would hold me. I did the same at the end of my monthlong stay, yielding to the practice of relationship with land and its then incipient spring, effortlessly quieting the familiar urgency to “get more done.”

continued on page 38

¹ Research Professor, Department of Mathematics; Director and Endowed Chair, Center for University Education & Scholarship, Office of the Provost, the University of Arizona

² Austrian author, currently a visiting scholar at Harvard University’s Wyss Institute; Hübl is known for his work on collective trauma healing through a lens on mysticism, science and the great wisdom traditions

³ Cultural and Inclusive Experiential Learning Opportunities (CIELO)

⁴ Place-based mathematics underpins the *Grounded in Place* (*Grounded*, for short) precalculus curriculum, a project dear to my heart built upon contexts like many of the ones we saw in Bali. Place-based mathematics informs the book I began during my sabbatical but is not its main focus. (For more on *Grounded*, see my Nov-Dec 2024 Newsletter column, “Befriending the Human in Each Other Through Journaling,” available at <https://awm-math.org/wp-content/uploads/2024/12/AWM-News-Nov-Dec-2024-WEB.pdf> and the *Grounded in Place* website www.math.arizona.edu/grounded-in-place).

On letting go, and learning to trust it

"Relax. Nothing is under control." —Unknown

Letting go is a practice often questioned by our fears and insecurities. Many of us hold doubts that now is the right time, or fear that a cause indispensably needs me, or attachment to obligations, or a sense that our worthiness depends on being needed or praised or promoted, or apprehension about the world discovering we are replaceable if we temporarily step away from a role. Whatever our specific situation, the illusion that we can have sufficient control over things by not breaking away from them is often something we latch onto to allay inner fears. But as the quote suggests, the realization that nothing is under control may actually relieve our stress rather than lead us into despair. Letting go may allow things to fall into place. Seeds to germinate. Good turns to happen. New pathways to open. Old perspectives to evolve. Agency to emerge anew.

As I prepared to go on sabbatical, the idea that wonderful humans with strengths and character different than mine would take over my leadership roles during my time away was a source of bliss. What had been planned or tabled to make my colleagues' jobs straightforward wouldn't prevent their creative touch, unique voice, fresh observations. And I was looking forward to the new insights that their fresh eyes would offer upon my return. I placed my trust in exceptional colleagues different from me and relished in disconnecting from my usual responsibilities without second thoughts. These colleagues made important and challenging decisions, and I supported them in making them, unconcerned about whether I might have chosen as they did.

This letting go brought me *freedom to* embrace my sabbatical book writing as I sought to do, rather than simply *freedom from* my usual academic responsibilities. In his teachings, Thomas Hübl—renowned spiritual teacher, author, and collective healing expert—points out a profound difference between experiencing “freedom to” versus “freedom from.” The first is a blank canvas, and artists’ palette, a window with a view, choice. The second is an escape from some kind of captivity, real or imagined. Letting go is freedom to. Looking back at Colin’s words at the start of this column, it seems that seeing sabbatical as “freedom from” responsibilities would have never sold him on taking one. But seeing it as “freedom to” reconnect with his humanity and renew himself to serve others anew was an altogether different proposition—one that could not be passed up.

On cultivating space, regardless of sabbaticals

"What we attend to, grows." —adrienne maree brown⁵

What about those of us who don’t have sabbaticals as an option? Or those of us who have one far behind or not for a while? Or those of us who work year-round? Cultivating space for staying in touch with our humanity and what rekindles meaning in our life and work alike works best as a daily practice, just like mathematics. Not all academic employers heed this knowing. But if we attend to it, the practice will grow.

About ten years ago now, I visited a colleague who had recently accepted the professorship of his dreams in Amsterdam. The job jaw-droppingly blended academic research with public engagement in science and the arts—he was equally talented in both areas. What I often remember, however, was a sense that both the local culture and the academic establishment valued and expected a healthy work-life balance. University buildings were off-limits past working hours and on weekends. Regular vacations were mandatory and not taking them was a sign of imbalance that could trigger formal supports. Emails arriving during vacation periods needed to be resent at a later time. People were encouraged to be people outside working hours. Employers seemed to understand they would reap the benefits. And universities helped create some of the space where inner cultivation and renewal might take place.

The affordances of my friend’s academic life—as I understood them—served as guideposts for what I needed to create for myself in 2018, the year I accepted a university-wide position I still hold. Suddenly, summers meant continued work and no longer offered the possibility of a respite. So, I leaned into what the European academy seemed to understand about faculty thriving—that the human qualities essential for our work require regular nourishing, growth space and renewal. I began inserting, not foregoing, daily walks during tight deadlines, taking short but regular time away from work and making it official and explicit, gently renouncing the perceived urgency to read email and instead having a simple meal at home, in silence, present with myself and the meal itself. Bliss isn’t important, presence is—simply being with the how it is, without trying to change it. As we hone this practice, we find a surprising number of others who do the same. And our workspace reaps the benefits, whether it’s apparent or not.

Sabbaticals are neither necessary nor sufficient for cultivating space for being and becoming. Inner growth, renewal, realignment with our calling—known or unknown—are not needs to get rid of, but intelligences to kindle. They are pathways to meaning and flourishing with the world and each other, across time. I invite you to ponder Thomas Hübl’s words again: “The future is not later in time, but higher in consciousness.”

⁵This quote appears and is recurrently referenced in brown’s 2017 best-selling book *Emergent Strategy: Shaping Change, Changing Worlds*. brown is known as an author, facilitator, activist and cofounder of the United States League of Young Voters

Ann, the Stay-at-Home Mom

Jane Piore Gilman, Distinguished Professor, Department of Mathematics, Rutgers University, Fellow of the American Mathematical Society, gilmajp@gmail.com

Ann was everything I wasn't and nothing that I wanted to be. I miss her so.

Was I jealous?

It is hard to explain.

There was a pair of high-rise buildings in the middle of Newark, buildings designed by Mies Van der Rohe, part of a failed attempt at urban renewal. There was a square grassy rectangular piece connecting the two buildings with a concrete playground in the middle. You might call it a park. The buildings were glass and the apartments had floor-to-ceiling windows. The curtains in the windows gave the building multicolored patches and I thought at first that there must be a rule by which each apartment could put up which colors and where. But it was just do as you please and the patchwork of colors worked together.

I would come down in the elevator from the twenty-first floor and walk my daughter in her baby carriage around the rectangular park. I saw all the other mothers together chatting and looking happy together with their children. I had come to Newark to start a new job straight from the hospital with a new baby. I was reeling from an unplanned C-section.

By Thanksgiving I was throwing plates across the kitchen. I told my boss that I needed an unpaid leave for the Spring semester. I told my husband that if I didn't get the leave, I would just quit. Eventually my boss said the dean had approved my leave, but that the department was not being given any resources to hire a replacement. Guilt, guilt, guilt. I went into the city and met my father for

lunch at his club. I told him that I was feeling bad about the situation and didn't know whether I should take the leave or go back to work. My father said the dean was just trying to save money. I took the leave, my guilt was erased, my father could do that.

And so, on one of my walks around the park, the girls took me in. There was Ann and Gigi and Carmen and Keiko. They said that they would take care of my daughter when I went back to work in the Fall. They all helped me.

Three years later, Ann and I moved out of Newark to the same NJ suburb and Keiko joined us there after a sojourn in Fort Lee.

I went back to work that first spring, became an associate professor and then a full professor and eventually a distinguished professor. Ann drove her husband, Jim, to the station every morning and picked him up every evening. Two of her three children were the same age as each of my two. My daughter wore hand-me-downs from Ann's daughter and from Keiko's daughter.

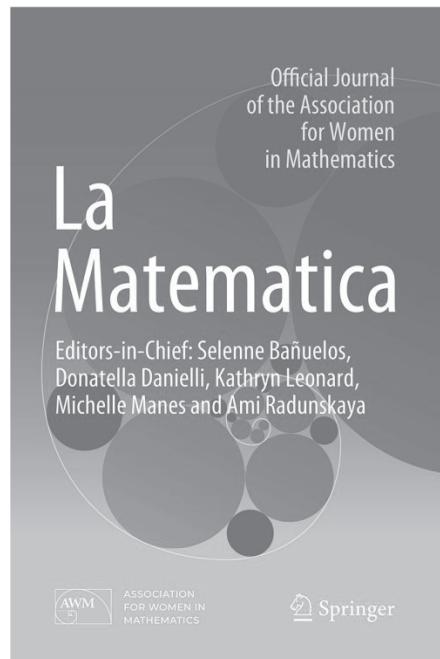
Ann backed me up all those early years whenever I had a conflict with work and motherhood.

She had ladies' lunches and teas for her mother and sisters and visiting aunts. She had an annual birthday party for all of her friends with April birthdays. Sometimes I went to her teas, sometimes I was too busy working and looked down on them. Sometimes I wondered why I never had a tea for my aunt.

Ann's husband, Jim, was older than us. He retired at 65 and was going to go fishing. He died of an aneurism before he even got to bait a hook. They buried him in a T-shirt that said "gone fishing." Ann sold their house and planned to move to a town house. She never finished moving and died of ovarian cancer a year after Jim.

Did I envy her life? Was her life something I wanted? Did I wish I had had her life—driving Jim back and forth to the station, having tea parties with the ladies?

It has been more than twenty years and I miss her so.



Official Journal
of the Association
for Women
in Mathematics

La
Matematica

Editors-in-Chief: Selenne Bañuelos,
Donatella Danielli, Kathryn Leonard,
Michelle Manes and Ami Radunskaya

AWM
ASSOCIATION
FOR WOMEN IN
MATHEMATICS

Springer

***La Matematica*, the official journal of the AWM, wants to publish your work!**

The AWM launched its flagship journal, *La Matematica*, in 2021, and we are looking for your submissions! *La Matematica* is an international, doubly anonymous peer-reviewed journal that features high-quality research from all areas of the mathematical sciences and is dedicated to supporting the flourishing of all mathematicians by adopting equitable practices in STEM publishing. The journal seeks to publish a variety of article types in all fields of mathematics (pure, applied, and computational) and considers full-length research articles and short communications that describe new theoretical results and innovative practical applications.

Interested in submitting? You can learn more about *La Matematica*'s scope and find out how to submit your research on the [journal site](#). For questions, please contact the journal's publisher representative, Anna Lombardo, at: anna.lombardo@springernature.com

Editors-in-Chief: Selenne Bañuelos, Donatella Danielli, Kathryn Leonard, Michelle Manes

IN MEMORIAM

Vicki Powers

(July 28, 1958 – February 2, 2025)

Parimala Raman, Emory University
parimala.raman@emory.edu

Vicki Powers, of Emory University, passed away at home in Atlanta, Georgia, on Feb 2, 2025, from complications due to ALS, just a year short of receiving the diagnosis. She is survived by her husband Colm Mulcahy, and their daughters Ann Powers and Molly Mulcahy.

Vicki grew up in Atlanta, Florida, and New Jersey. She was educated at the University of Chicago (AB, 1980), and then at Cornell (PhD, 1985). After two years at the University of Hawaii at Manoa, during which time she married Colm Mulcahy, Vicki joined the math faculty at Emory, and a year later Colm joined the Spelman faculty. She and Colm had both been doctoral students of Alex FTW Rosenberg.

In 1993, she became the second woman in the history of the department to get tenure, and in 2006, she was the first woman to be internally promoted to full professor. Today, women make up almost half of the Emory math department.

Vicki's early research was in ordered fields and the algebraic theory of quadratic forms. In time, she moved into real algebraic geometry, especially positive polynomials. Her theoretical work has been cited in applications of control theory such as robot design. She also published on the math of voting systems.

She traveled often to engage with collaborators throughout North America and Europe. In 2020, as COVID raged, Vicki was on sabbatical leave, and she speedily wrote the Springer book *Certificates of Positivity for Real Polynomials—Theory, Practice, and Applications*. Vicki recently remarked that she didn't feel treated differently by math colleagues, but noted that early in her career, the men in the department either had no children or had wives who cared for them. "I was very careful not to inconvenience my department, and had my kids in the summer," she added. Ann was born in 1990, and Molly arrived in 1993, just after Vicki got tenure. Colm recalls, "Curiously, it was my employer, Spelman, that threw a baby shower for us in 1990." Vicki had research leaves in Regensburg (1991–1992) and Madrid (2002–2003), during which Colm took the lead running the household. In 2013–2015, Vicki was an NSF Program Officer in the DC area.

Early in her career, she served as chair of the Emory faculty concerns committee of the President's Commission for the Status of Women, addressing some of the issues facing women academics. "We actually started getting Emory to move towards having a definite maternity and paternity policy—which they do have now," she recently recalled.



Vicki Powers, Portland, Oregon, August 2009

Vicki taught at the Enhancing Diversity in Graduate Education (EDGE) program in 2001 at Spelman College. Program co-director Sylvia Bozeman (Spelman) recalls, "She assisted a group of ten young women in making the transition from undergraduate-to graduate-level maturity in abstract algebra, the majority of whom later earned doctoral degrees in the mathematical sciences." Participant Carla Cotwright-Williams PhD (now at the Department of Defense) commented, "Vicki was extremely kind and considerate as I struggled with my confidence with graduate-level math."

Spelman grad and later EDGE co-director Ulrica Wilson PhD (Morehouse College) remembers her graduate student days at Emory, "Vicki's office was across the hall from mine, and she was on my dissertation committee. I remember her warmth, her generous spirit, her love of food and travel, and the way she shared her whole self with me and others in the department. I will continue the lessons she taught me to live life to the fullest and not take yourself too seriously!"

In 2024, Vicki received Emory's George P. Cuttino Award for Excellence in Mentoring, and comments from two of her four PhD students were quoted. One of those was Dionne Bailey (Angelo State University, TX), who was already raising two children when she got pregnant midway through graduate school. "[Vicki] would share some of the struggles she had being a female in her discipline and raising two daughters. She gave me some insight into things I might face. She was always open and more like a real person as opposed to just my professor," Bailey recalls.

Vicki's first PhD student, Kathleen Velueta (then Krzastek), writes: "She was an extraordinary advisor, teacher, mentor, and friend. I was a nontraditional student in many ways—much older than most graduate students, more experienced in teaching mathematics than "doing" mathematics and having a nonstandard undergraduate education. Vicki's friendly personality and teaching style made the difficult algebra classes understandable for me."

My own PhD student Sujatha Ramdorai (Bangalore/Vancouver) lived in the same building as Vicki in Regensburg over 30 years ago. "Long before EDI (Equity, Diversity, and Inclusion) became kind of mainstream, it was clear that these tenets were naturally ingrained in Vicki and Colm," she recalls. "We often compared notes on bringing up children, [and] what it meant for girls and young women interested in entering politics, and what one had learnt about being women mathematicians."

The memories of Tara Smith (University of Cincinnati) go back further. "I met Vicki at the very first mathematics conference I attended, in Corvallis in 1986, I was two years away from finishing my PhD. Subsequently, Vicki invited me to speak at the first conference where I would actually present my own research, at a special session in Chicago in 1989. We were both at the JMM in San Francisco, in January of 1991, each of us with infants in tow. Our mathematician spouses watched the babies while Vicki and I attended and presented at the Real Algebraic Geometry and Quadratic Forms sessions."

Here are some reflections from Dwight Duffus, for many years the Emory mathematics department chair, on her huge contributions to Emory University and its mathematics faculty:

"Vicki had a wide variety of academic and nonacademic interests, persistent curiosity, and the wish to interact with and contribute to her communities—whether the discipline of mathematics, her department, college, and university, or the larger world. Vicki's intellectual liveliness led to a substantial transformation in the main topic of her research from ordered fields and quadratic forms to real algebraic geometry. As a teacher she innovated repeatedly with new course design and pedagogy: two significant contributions are a sequence in life sciences calculus developed in the 1990s and, more than two decades later, a seminar and a regular course on the mathematics of electoral systems.



Vicki with daughters Ann and Molly headed to DC March in January 2017.

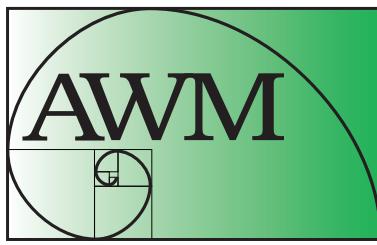


With her 2001 PhD student Dionne Bailey who recalls:
"I honestly don't think that I could have completed my dissertation with any other thesis advisor. She not only was a brilliant mathematician, but she was compassionate, understanding, and uplifting."

Her breadth of interests was evident in her interdisciplinary contributions. Our department has a longstanding joint major with Economics featuring a senior seminar team-taught with an economist. After the retirement of one of the major's founders, Vicki stepped in and offered it with a series of colleagues from Economics, all of whom spoke highly of her energy, commitment and versatility. She was instrumental in envisioning a new unit devoted to quantitative theory and methods that eventually grew into a quantitative theory and methods (QTM) department that now offers one of the most popular programs in Emory College. We also have a joint major with political science, thanks in large part to her.

For Vicki, institutional service was central to her role as a professor. It also fit with her outgoing nature and wish to contribute broadly. Her activities within the college and university were remarkable in breadth and depth: selection and hiring committees; task forces on research, student life, strategic planning and the status of women; committees on athletics, educational policy, the honor code and curriculum. For her the high points were the President's Advisory Committee (2010–2013) and the College Tenure and Promotion Committee (2007–2010 and 2022–2024). The latter, in particular, requires intense, sustained engagement of its members. The payoffs, as Vicki liked to note, are the opportunities to discharge a central role of the faculty and to view the extraordinary quality and diversity of our colleagues' scholarship across the arts and sciences."

I, Parimala, worked alongside Vicki at Emory for the last 20 years, and I admired her balanced outlook, fairness, kindness, generosity, and above all her deeply human outlook. Her commitment to the encouragement of women in mathematics stands tall and will inspire generations to come. I have lost a dear friend, cherished colleague, and a great mathematician who instilled cheer all around her. Her spirit and impact will endure.



ASSOCIATION FOR
WOMEN IN MATHEMATICS

AWM Workshop at the 2026 SIAM Annual Meeting Call for Mentors

For many years, the Association for Women in Mathematics has held a series of workshops in conjunction with major mathematics meetings. The AWM Workshops serve as follow-up workshops to Research Collaboration Conferences for Women (RCCW), featuring speakers from one of the AWM Research Networks. An AWM Workshop is scheduled to be held in conjunction with the 2026 SIAM Annual Meeting happening in Cleveland, OH, July 6–10, 2026.

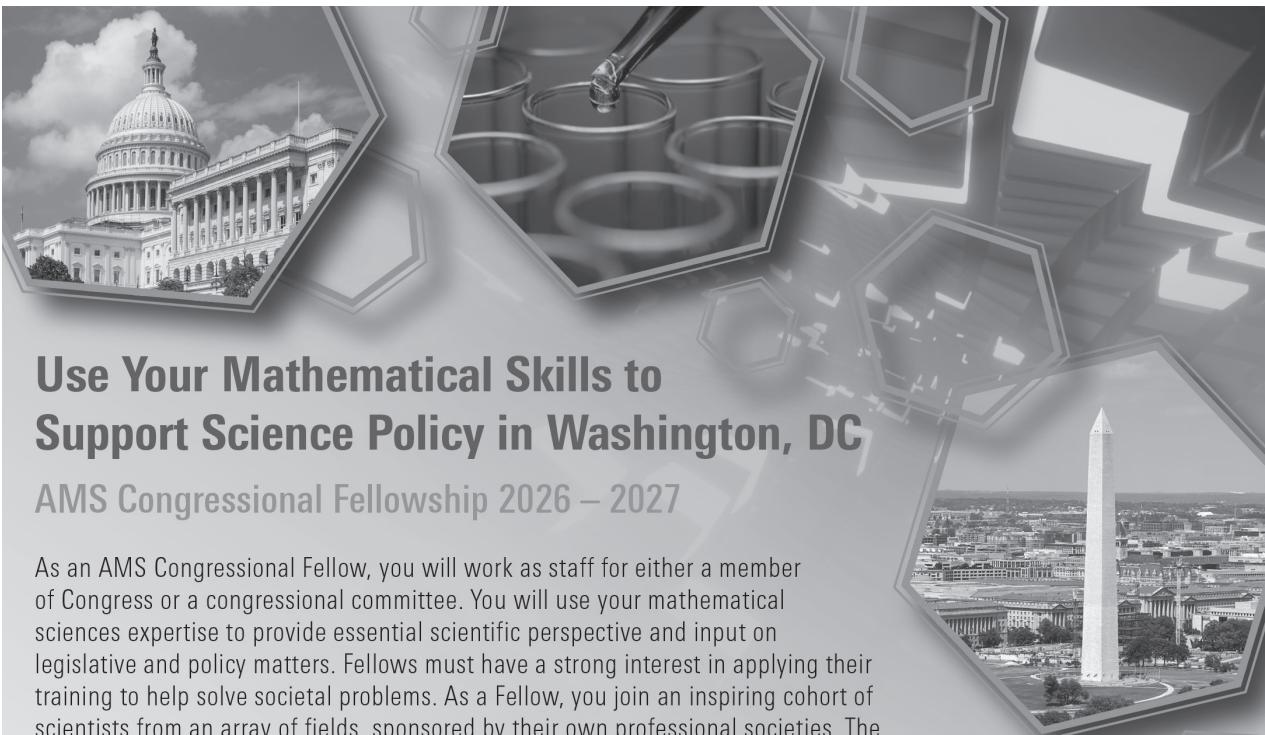
The AWM Workshop at SIAM will consist of two research minisymposia focused on **Numerical Analysis and Scientific Computing** organized by Fengyan Li and Jing-Mei Qiu, a **poster session**, a **panel** and a **mentoring luncheon**. The research minisymposia will feature selected junior and senior mathematicians from the Research Network Women in the Numerical Analysis and Scientific Computing (WiNASC). This workshop follows the RCCW that took place in 2024 at ICERM.

POSTER SESSION: The poster session is open to *all* areas of research; graduate students working in areas related to numerical analysis and scientific computing are especially encouraged to apply. Poster presenters will be selected through an application process to present at the workshop reception and poster session. Pending funding availability, AWM will provide partial travel support to selected graduate students for their participation in the AWM Workshop. The workshop will include a mentoring luncheon where workshop participants will have the opportunity to meet with other mathematicians at all stages of their careers.

MENTORS: While the deadline for graduate students was November 15, 2025, we seek volunteers to act as mentors for graduate students as part of the workshop. If you are interested, please contact the AWM office at awm@awm-math.org by **May 15, 2026**.

All SIAM participants are invited to attend the talks and poster presentations. Departments are urged to help graduate students and junior faculty who are not selected for the workshop obtain institutional support to attend the presentations.

ADVERTISEMENT



Use Your Mathematical Skills to Support Science Policy in Washington, DC

AMS Congressional Fellowship 2026 – 2027

As an AMS Congressional Fellow, you will work as staff for either a member of Congress or a congressional committee. You will use your mathematical sciences expertise to provide essential scientific perspective and input on legislative and policy matters. Fellows must have a strong interest in applying their training to help solve societal problems. As a Fellow, you join an inspiring cohort of scientists from an array of fields, sponsored by their own professional societies. The Fellowship runs from September 2026 through August 2027.

Now in its 22nd year, the AMS Congressional Fellowship provides a unique public policy learning experience and demonstrates the value of science-government interaction. The fellowship includes an orientation on congressional and executive branch operations, and a yearlong seminar series on issues involving science, technology, and public policy.

Applicants must:

- hold a PhD or an equivalent doctoral-level degree in the mathematical sciences by June 15, 2026.
- be a US citizen.
- provide a statement of interest and qualifications.
- submit a current curriculum vitae and three letters of recommendation.
- not be a federal employee.

Applications will open in early September 2025 and close February 1, 2026.

The Fellowship stipend is US\$108,162 for the fellowship period, with additional allowances for relocation and professional travel, as well as a contribution toward health insurance.



Advancing research. Creating connections.

Learn more at the **JMM2026**
session on **DC-based Policy**
and Communications
Opportunities, Tuesday,
January 6, 2026 at 4:30 p.m.

Scan here



or visit www.ams.org/ams-congressional-fellowship
to learn more and apply.

JOIN SIAM NOW AND SAVE BIG!

SIAM membership includes 14,000+ applied mathematicians and computational and data scientists working in academia, industry, government, and labs.

As a SIAM Member, You'll Get:

- Subscriptions to *SIAM News*, *SIAM Review*, and *SIAM Unwrapped* e-newsletter
- Discounts on SIAM books, journals, and conferences
- Eligibility to join SIAM activity groups, vote for or become a SIAM leader, and nominate or be nominated as a SIAM Fellow
- The ability to nominate two students for free membership

You'll Experience:

- Networking opportunities
- Access to cutting edge research
- Visibility in the applied mathematics and computational science communities
- Career resources

You'll Help SIAM to:

- Support outreach to students
- Increase awareness of the importance of applied and industrial mathematics
- Advocate for increased funding for research and education



“SIAM has long been a bedrock for applied mathematicians, providing crucial support, recognition, and connections. As we confront new challenges—explosive growth in data science, shifts in computational science, and financial complexities—I am committed to helping SIAM meet these challenges while maintaining its extremely high-quality and successful activities. With collective support, we'll navigate these changes and ensure that SIAM remains the go-to hub for applied mathematics by embracing excellence and fostering a welcoming community.”

Carol S. Woodward, SIAM President,
Lawrence Livermore National Laboratory

SAVE 30%
AND GET AN
ADDITIONAL 25%
OFF WITH CODE
MBNW26AWM

Join SIAM today at siam.org/joinsiam

AWM members qualify for a special reciprocal member rate that is 30% less than the regular member rate. Plus, if you are new to SIAM and join by December 31, 2025, you'll get an additional 25% off your membership when you enter promo code MBNW26AWM at check out.

siAm | Society for Industrial and
Applied Mathematics

9/25

ADVERTISEMENT

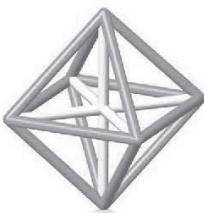
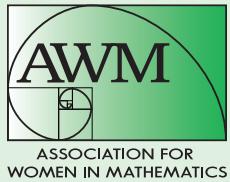
Shop the AWM Store where all proceeds support AWM activities and programs!

<https://store.awm-math.org/>

Get the T-shirt size you want, not just the sizes we have on-hand at conferences!

New inventory is being added. Our quality shirts and onesies are screen-printed by ASCOTT, a small woman-owned T-shirt company in Ann Arbor, Michigan!

Student chapters get large order discounts.



IAS|PCMI
PARK CITY
MATHEMATICS INSTITUTE

A program of the Institute for Advanced Study

The 2026 program will be on
Knotted Surfaces in Four-
Manifolds. June 28 - July 18.

For information and to apply go to:
<https://www.ias.edu/pcmi>

PCMI is an intensive 3-week summer program for researchers and students in mathematics held each year in the mountain town of Park City, Utah.

The research topic changes from year to year. Attending PCMI provides an opportunity to be part of a stimulating environment that encourages leisurely interactions with people from many different stages of their mathematical careers.



ADVERTISEMENT

IAS | INSTITUTE FOR
ADVANCED STUDY

SCHOOL OF MATHEMATICS



Memberships in 2026-27

Postdoctoral Memberships
For early career applicants (up to 5 years past PhD)

Von Neumann Fellowship
For exceptional mid-career applicants
(5-15 years past PhD)

Sabbatical Memberships
Applications open for both 2026-27 and 2027-28

Special-Year Program
Positions dedicated to the year-long program on
Conformally Symplectic Dynamics and Geometry,
led by Distinguished Visiting Professor Michael
Hutchings

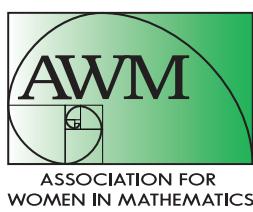
Deadline December 1

ias.edu/math/apply



The IAS offers campus
housing, subsidized child-
care, and other benefits.

 **SUMMER COLLABORATORS**
Spend 1-3 weeks working
intensively with collaborators.
ias.edu/math/programs



DISPLAY AD RATES

Full-page	7 1/8" x 8 1/2"	\$638
1/2 page (horizontal)	7 1/8" x 4 1/8"	\$385
1/2 page (vertical)	3 9/16" x 8 1/2"	\$385
1/4 page (vertical)	3 7/16" x 4 1/8"	\$258.50
1/4 page (horizontal)	7 1/8" x 1 7/8"	\$258.50

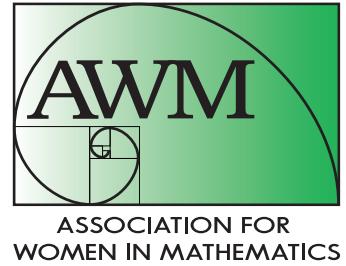
For further information, see awm-math.org.

2025–2026 Individual Membership Form

JOIN ONLINE at [awm-math.org!](http://awm-math.org)

Please fill in this information and return it along with your dues to:

AWM Membership, PO Box 40876, Providence, RI 02940



Last Name _____ First Name _____ M.I. _____

Address _____

City _____ State/Province _____

Zip/Postal Code _____ Country _____

AWM's membership year is from October 1 to September 30. Please fill in this information and return it along with your dues to: AWM Membership, PO Box 40876, Providence, RI 02940

The AWM Newsletter is published six times a year. If you have questions, contact AWM at awm@awm-math.org, 401.455.4042, or visit our website at: <https://awm-math.org>.

E-mail: _____ Home Phone: _____ WorkPhone: _____

PROFESSIONAL INFORMATION:

Position: _____

Institution/Company: _____

City: _____ State/Province: _____ Zip/Postal Code: _____

DEGREES EARNED: _____ Degree(s) _____ Institution(s) _____ Year(s) _____

Doctorate: _____

Masters: _____

Bachelors: _____

INDIVIDUAL DUES SCHEDULE

Please check the appropriate membership category below. Make check or money order payable to: Association for Women in Mathematics.

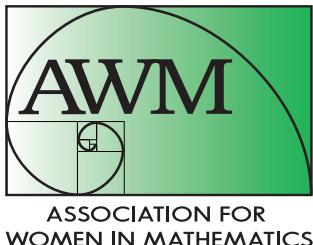
NOTE: All checks must be drawn on U.S. banks and be in U.S. funds.

<input type="checkbox"/> Regular individual membership (<i>new members only</i>).....	\$35
<input type="checkbox"/> Regular individual membership (<i>members earning <\$90,000</i>).....	\$70
<input type="checkbox"/> Regular individual membership (<i>members earning ≥\$90,000</i>).....	\$100
<input type="checkbox"/> Family membership, <i>please indicate family member who is a regular AWM member</i> : _____	\$40
<input type="checkbox"/> Contributing membership (<i>members earning <\$90,000</i>) (<i>includes designation of a free student membership</i>)	\$160
<input type="checkbox"/> Contributing membership (<i>3 year membership, members earning <\$90,000</i>)	\$480
<input type="checkbox"/> Contributing membership (<i>members earning ≥\$90,000</i>) (<i>includes designation of a free student membership</i>)	\$190
<input type="checkbox"/> Contributing membership (<i>3 year membership, members earning ≥\$90,000</i>)	\$570
<input type="checkbox"/> Part-time employed	\$35
<input type="checkbox"/> AWM-SIAM Reciprocity membership	\$35
<input type="checkbox"/> AWM-KWMS Affiliate membership	\$30
<input type="checkbox"/> Retired membership	\$40
<input type="checkbox"/> Student membership	\$25
<input type="checkbox"/> Unemployed membership	\$20
<input type="checkbox"/> Gift membership, <i>please indicate name and email of giftee</i> : _____	\$70
<input type="checkbox"/> Outreach membership	\$10
<input type="checkbox"/> Contribution to the AWM Endowment fund	\$_____
<input type="checkbox"/> Contribution to the AWM Annual Giving Campaign	\$_____
<input type="checkbox"/> I do not want my name to appear in annual lists of contributors to AWM's funds.	

Please note that all student, unemployed, outreach, family, gift membership, and KWMS affiliate members and members with non-US addresses receive only the electronic version of the newsletter.

If you wish to receive a print version, please check here

TOTAL ENCLOSED \$ _____



ASSOCIATION FOR
WOMEN IN MATHEMATICS

AWM
PO Box 40876
Providence, RI 02940

NONPROFIT ORG
U.S. POSTAGE PAID
MERRIFIELD, VA
PERMIT NO. 2333

Printed in the U.S.A.

ASSOCIATION FOR WOMEN IN MATHEMATICS

Volume 55, Number 6, November–December 2025

ADDRESS CORRECTION FORM

- Please change my address to:
- Please send membership information to my colleague listed below:
- No forwarding address known for the individual listed below (enclose copy of label):
(Please print)

MAIL TO:

Name _____

Address _____

City _____ State _____ Zip _____

Country (if not U.S.) _____ E-mail Address _____

Position _____ Institution/Org. _____

Telephone: Home _____ Work _____

or E-MAIL:

awm@awm-math.org