AWM Events at the 2024 Joint Mathematics Meetings
Moscone Center
San Francisco, CA, January 3–6, 2024 (Wednesday – Saturday)

Make AWM part of your JMM plan! Check out the webpage with speaker details or reach out to learn more about our events at JMM 2024.

Tuesday, January 2, 2024

AWM Executive Committee Meeting
9:00 am – 12:30 pm, Pacific H, Marriott Marquis San Francisco

AWM Annual Executive Committee Meeting. All former AWM Presidents are invited to attend. Please reach out to AWM Executive Director to let her know you are attending.

Wednesday, January 3, 2024

AWM Special Session on Women in Mathematical Biology, I
Wednesday, 8:00 am – 12:00 pm, Room 301, The Moscone Center
Organizers:
    Christina Edholm, Scripps College
    Lihong Zhao, University of California, Merced
    Lale Asik, University of the Incarnate Word

AMS-AWM Special Session for Women and Gender Minorities in Symplectic and Contact Geometry and Topology, I
Wednesday, 9:00 am – 12:00 pm, Room 023, The Moscone Center
Organizers:
    Sarah Blackwell, Max Planck Institute for Mathematics
    Luya Wang, University of California, Berkeley
    Nicole Magill, Cornell University

AMS-AWM Special Session on Solvable Lattice Models and their Applications Associated with the Noether Lecture, I
Wednesday, 1:00 pm – 5:00 pm, Room 104, The Moscone Center
Organizers:
    Amol Aggarwal, Columbia
    Benjamin Brubaker, University of Minnesota – Twin Cities
    Daniel Bump, Stanford
    Andrew Hardt, Stanford University
    Slava Naprienko, University of North Carolina at Chapel Hill
    Leonid Petrov, University of Virginia
    Anne Schilling, University of California, Davis
AWM Special Session on Women in Mathematical Biology, II
Wednesday, 1:00 pm – 5:00 pm, Room 301, The Moscone Center
Organizers:
  Christina Edholm, Scripps College  
  Lihong Zhao, University of California, Merced  
  Lale Asik, University of the Incarnate Word

AMS-AWM Special Session for Women and Gender Minorities in Symplectic and Contact Geometry and Topology, II
Wednesday, 2:00 pm – 5:00 pm, Room 023, The Moscone Center
Organizers:
  Sarah Blackwell, Max Planck Institute for Mathematics  
  Luya Wang, University of California, Berkeley  
  Nicole Magill, Cornell University

AWM Business Meeting
Wednesday, 3:45 pm – 4:15 pm, Room 307, The Moscone Center

We invite all AWM Members to attend, and this meeting is open to the public. We will run through a quick “year in review” discussing what AWM has been working on this last year. This is always an open opportunity for the math community to bring up concerns, questions and interests about AWM.

Awards Ceremony
Wednesday, 4:30 pm – 5:45 pm, Room 207, The Moscone Center

AWM Awards will be given to:
  Yunqing Tang, University of California, Berkeley (The AWM Microsoft Research Prize in Algebra and Number Theory); Robin Neumayer, Carnegie Mellon University (The AWM Sadosky Research Prize in Analysis); Trena Wilkerson, Baylor University (Louise Hay Award for Contribution to Mathematics Education); Cristina Villalobos, University of Texas Rio Grande Valley (M. Gweneth Humphreys Award for Mentorship of Undergraduate Women in Mathematics);
Abigail Hickok, Columbia University, and Parvathi M. Kooloth, Pacific Northwest National Laboratory; and

Abigail Hickok  
Dissertation Prize Recipient  
Parvathi M. Kooloth  
Dissertation Prize Recipient

Zoe Batterman, Pomona College (Schafer Mathematics Prize Winner); Arianna Meenakshi (Meenakshi) McNamara, Purdue University (Schafer Mathematics Prize Winner); and Mattie Ji, Brown University, (Schafer Mathematics Prize Runner-up).

Zoe Batterman  
Schafer Mathematics Prize Winner  
Arianna Meenakshi (Meenakshi) McNamara  
Schafer Mathematics Prize Winner  
Mattie Ji  
Schafer Mathematics Prize Runner-up

Grand Opening Reception  
Wednesday, 6:00 pm – 8:30 pm, Hall A, The Moscone Center

Thursday, January 4, 2024

AWM-AMS Noether Lecture, *The Ubiquity of Crystal Bases*  
Thursday, 9:45 am – 10:50 am, Room 207, The Moscone Center

Anne Schilling, University of California, Davis

Abstract:
Crystal bases are combinatorial skeletons of Lie algebra representations. They appeared in the work of Kashiwara, Lusztig and Littelmann on quantum groups and the geometry of flag varieties. Crystal bases arise in many unexpected places, from mathematical physics to probability and number theory. In this talk, I will showcase ten reasons and applications of how crystal theory can be used to solve problems in representation theory, geometry and beyond.

AWM established the Emmy Noether Lectures in 1980 to honor women who have made fundamental and sustained contributions to the mathematical sciences. In April 2013 the lecture was renamed “AWM-AMS Noether Lecture” and in 2015 was jointly sponsored by AWM and AMS. Learn more about nominating someone for this worthy opportunity here.
AMS-AWM Special Session on Solvable Lattice Models and their Applications Associated with the Noether Lecture, II
Thursday, 1:00 pm – 5:00 pm, Room 104, The Moscone Center
Organizers:
Amol Aggarwal, Columbia
Benjamin Brubaker, University of Minnesota – Twin Cities
Daniel Bump, Stanford
Andrew Hardt, Stanford University
Slava Naprienko, University of North Carolina at Chapel Hill
Leonid Petrov, University of Virginia
Anne Schilling, University of California, Davis

AWM Special Session on EvenQuads Live and in person: The honorees and the games, I
Thursday, 1:00 pm – 5:00 pm, Room 158, The Moscone Center
Organizers:
sarah-marie belcastro, Mathematical Staircase, Inc.
Sherli Koshy-Chenthittayil, Touro University Nevada
Oscar Vega, California State University, Fresno
Monica D. Morales-Hernandez, Adelphi University
Linda McGuire, Muhlenberg College
Denise A. Rangel Tracy, Fairleigh Dickinson University

AWM Special Session on Recent Developments in Harmonic Analysis, I
Thursday, 1:00 pm – 5:00 pm, Room 301, The Moscone Center
Organizers:
Betsy Stovall, University of Wisconsin-Madison
Sarah E Tammen, UW-Madison

Friday, January 5, 2024

AMS-AWM Special Session for Women and Gender Minorities in Symplectic and Contact Geometry and Topology, III
Friday, 8:00 am – 12:00 pm, Room 023, The Moscone Center
Organizers:
Sarah Blackwell, Max Planck Institute for Mathematics
Luya Wang, University of California, Berkeley
Nicole Magill, Cornell University

AMS-AWM Special Session on Solvable Lattice Models and their Applications Associated with the Noether Lecture, III
Friday, 8:00 am – 12:00 pm, Room 104, The Moscone Center
Organizers:
Amol Aggarwal, Columbia
Benjamin Brubaker, University of Minnesota – Twin Cities
Daniel Bump, Stanford
Andrew Hardt, Stanford University
Slava Naprienko, University of North Carolina at Chapel Hill
Leonid Petrov, University of Virginia
Anne Schilling, University of California, Davis

AWM Special Session on EvenQuads Live and in person: The honorees and the games, II
Friday, 8:00 am – 12:00 pm, Room 158, The Moscone Center
Organizers:
sarah-marie belcastro, Mathematical Staircase, Inc.
Sherli Koshy-Chenthittayil, Touro University Nevada
Oscar Vega, California State University, Fresno
Monica D. Morales-Hernandez, Adelphi University
Linda McGuire, Muhlenberg College
Denise A. Rangel Tracy, Fairleigh Dickinson University

AWM Special Session on Women in Mathematical Biology, III
Wednesday, 8:00 am – 12:00 pm, Room 301, The Moscone Center
Organizers:
Christina Edholm, Scripps College
Lihong Zhao, University of California, Merced
Lale Asik, University of the Incarnate Word

AWM Workshop: Mathematicians + Wikipedia — A Training Edit-a-thon
Friday, 10:30 am – 12:00 pm, Room 202, The Moscone Center
Organizers:
Francesca Bernardi, Worcester Polytechnic Institute
Xavier Ramos Olivé, Smith College

AWM Special Session on Recent Developments in Harmonic Analysis, II
Friday, 1:00 pm – 5:00 pm, Room 301, The Moscone Center
Organizers:
Betsy Stovall, University of Wisconsin-Madison
Sarah E Tammen, UW-Madison

AWM Panel: Celebrating Academic Pivots in Mathematics
Friday, 1:00 pm – 2:30 pm, Room 304, The Moscone Center

Organizers:
Kelly McKinnie, University of Montana
Kate Petersen, University of Minnesota Duluth
Radmila Sazdanovic, NC State University

Panelists:
Ranthony A C Edmonds, The Ohio State University
Laura Monroe, Los Alamos National Laboratory
Ami Radunskaya, Pomona College
Talitha M Washington, Clark Atlanta University & Atlanta University Center

Moderator:
Kate Petersen, University of Minnesota Duluth
AMS-AWM Special Session for Women and Gender Minorities in Symplectic and Contact Geometry and Topology, IV
Friday, 2:00 pm – 5:00 pm, Room 023, The Moscone Center
Organizers:
Sarah Blackwell, Max Planck Institute for Mathematics
Luya Wang, University of California, Berkeley
Nitya Mani, Massachusetts Institute of Technology
Praveeni Mathangadeera, Oregon State University
Jessie Loucks, University of Washington
Nicole Magill, Cornell University

AWM Workshop Poster Presentations by Women Graduate Students
Friday, 4:00 pm – 5:30 pm, Golden Gate B Foyer, Marriott Marquis San Francisco

Poster Session Organizers from AWM’s JMM Committee:
Radmila Sazdanovic, North Carolina State University
Catherine Beneteau, University of South Florida
Claudia Miller, Syracuse University
Janet Striuli, Fairfield University
Grazia Viola, University of South Florida

Poster Judging Coordinator:
Matthew Krauel, California State University, Sacramento

JMM Poster Judges Needed: Will you be at JMM? We are currently recruiting for judges to select the top poster presentations; the AWM poster winner receives a prize of funding for a one-week workshop or event at one of the participating mathematical sciences institutes! Contact JMM Poster Judging Coordinator Matthew Krauel to volunteer (krauel@csus.edu). Poster judging will be Friday, January 5, 4:00 pm - 5:30 pm. Please scan the list of posters below and especially if one is in your field, reach out!

Graduate Student Poster Presenters
- Rachael May Alfant, Rice University, Periodicity of Mixed Integer Programming Gap Functions
- Wedad Alharbi, Saint Louis University, Recovery of signals from saturated linear measurements
- Tahmineh Azizi, University of Wisconsin-Madison, Altered Structure of EEG signals in patients with Epileptic Seizure
- Rachel Bailey, University of Connecticut, DEK-Type Orthogonal Polynomials
- Elsie Cortes, University of California, Merced, Boundary Integral Equation Methods for Optical Cloaking Models
- Sarah Days-Merrill, University of Vermont, Generalizing the Polynomial Ring Learning with Errors Problems for Non-Monogenic Number Fields
- Melissa De Jesus, Florida International University, On a New Paradigm for Binary Phase-Separation Processes
- Abigayle Dirdak, Arizona State University, The Pentagram Map and Gale Transform
- Han G Le, University of Michigan, Free energy of the bipartite spherical SK model at critical temperature
- Jessie Loucks, University of Washington, Algebra and Geometry of Camera Resectioning
- Nitya Mani, Massachusetts Institute of Technology, Turan problems on mixed graphs
- Praveeni Mathangadeera, Oregon State University, Sensitivity to different assumptions in a permafrost model responding to surface temperature variations
- Grace McCourt, University of Illinois at Urbana-Champaign, Minimum degree ensuring that a hypergraph is hamiltonian-connected
- Sarah Poiani, University of New Mexico, The Duality of Pair Operations
● Shraddha Rajpal, George Mason University, *Data Assimilation For Quantum NV Diamond Spectroscopy*

● Brooke Randell, Bill and Linda Frost Fund, *Exploring the Numerical Range of Block Toeplitz Operators*

● Awa Traore, University of Alabama, *Dynamics of a Multi-Fluid System: Stability Analysis*

**AWM Reception and Awards Presentation**
Friday, 5:00 pm – 6:30 pm, Golden Gate B, Marriott Marquis San Francisco

*There will be food, drink, music, awesome people and cool friends of AWM. Connect and reconnect with your community while celebrating recipients of this year’s AWM prizes.*

*We will be acknowledging the new class of AWM Fellows and the AWM Service Award winners, along with all other AWM Award winners!*

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**Saturday, January 6, 2024**

**AWM Special Session on Mathematics in the Literary Arts and Pedagogy in Creative Settings, I**
Saturday, 8:00 am – 12:00 pm, Room 308, The Moscone Center

Organizers:
- **Shanna Dobson**, University of California, Riverside
- **Claudia Maria Schmidt**, California State University

**AWM Workshop: Women in Operator Theory (WinOT), I**
Saturday, 9:00 am – 11:30 am, Room 301, The Moscone Center

Organizers from AWM’s JMM Committee and the WinOT Network:
- **Asuman Aksoy**, Claremont McKenna College
- **Catherine Beneteau**, University of Southern Florida

Speakers:
- 9:00 am, **Pamela Gorkin**, Bucknell University, *Blaschke products and the Crouzeix Conjecture*
- 9:30 am, **Kelly Bickel**, Bucknell University, *Clark Measures for Rational Inner Functions*
- 10:00 am, **Brittney R Miller**, Coe College, *Quadratic Rational Self-maps of the Disk*
- 10:30 am, **Alea L Wittig**, University at Albany SUNY, *Wolff’s Ideal Problem on the Multiplier Algebra of the Dirichlet Space*
- 11:00 am, **Linda J. Patton**, Cal Poly San Luis Obispo, *Operator numerical ranges determined by finite matrices*

**Mentoring Luncheon**
Saturday, 12:00 pm – 1:30 pm, Room 302, The Moscone Center

**AWM Special Session on Mathematics in the Literary Arts and Pedagogy in Creative Settings, II**
Saturday, 1:00 pm – 4:00 pm, Room 308, The Moscone Center
Organizers:

Shanna Dobson, University of California, Riverside
Claudia Maria Schmidt, California State University

AWM Workshop: Women in Operator Theory (WinOT), II
Saturday, 1:30 pm – 4:30 pm, Room 301, The Moscone Center

Organizers from AWM’s JMM Committee and the WinOT Network:

Asuman Aksoy, Claremont McKenna College
Catherine Beneteau, University of Southern Florida

Speakers:

• 1:30 pm, Anna H. Kaminska, University of Memphis, Geometric properties of noncommutative symmetric spaces of measurable operators
• 2:00 pm, Sana Kazemi, University of Memphis, Isometries of Special Classes of Sequence Spaces
• 2:30 pm, Jill E Guerra*, Harvard University, Surjective Isometries of C*-algebras
• 3:00 pm, M. Eugenia Celorio Ramirez*, Lancaster University, Arens regularity of weighted convolution algebras that arise from totally ordered semilattices
• 3:30 pm, Flavia Colonna*, George Mason University, Essential norm of intrinsic operators from Banach spaces of analytic functions into weighted-type spaces
• 4:00 pm, Hyun-Kyoung Kwon*, University At Albany, SUNY, Spectral optimization and the Gohberg-Sigal Theory

Lactation Pods, Accessibility, & Other Special Needs

Accessible Mamava lactation pods (one standard and one ADA) will be available at the Moscone Center during JMM 2024.

For information on location pods and other accessibility needs please see: https://www.jointmathematicsmeetings.org/meetings/national/jmm2024/2300_accessibility.

The AWM 2024 JMM Organizing Committee

A special thanks to the AWM committee members who have helped organize this year’s program!

• Asuman Aksoy (Claremont McKenna College)
• Catherine Beneteau (University of Southern Florida)
• Matthew Krauel (California State University, Sacramento)
• Kelly McKinnie (University of Montana)
• Claudia Miller (Syracuse University)
• Radmila Sazdanovic (North Carolina State University), Chair
• Janet Striuli (Fairfield University)
• Maria Grazia Viola (University of Southern Florida)
Thank You to Our JMM Sponsors!