AWM Events at the 2020 Joint Mathematics Meetings
The Colorado Convention Center
January 14-18, 2020, Denver, CO

Make AWM part of your JMM plan! Reach out to learn more about activities.

Tuesday, January 14, 2020

The AWM Moving Towards Action Workshop
8:00am-5:00pm, Denver 1 & 2, Hilton Denver City Center

When members of the mathematics community are made to feel unwelcome in our profession, the success of mathematics as a whole is put into jeopardy. This workshop is focused on understanding and creating welcoming environments (providing actionable information and process change plans to mathematics department interested in driving cultural change at their respective institutions) so as to invite more people to enter and persist in STEM disciplines.

The Moving Towards Action Workshop to improve the culture and climate in the mathematical sciences will take place in conjunction with the 2020 Joint Mathematics Meeting (JMM) in Denver, Colorado. Learn more about this exciting event at https://awm-math.org/meetings/jmm-2020-workshop/

Left to Right: Vicki Magley (UConn), Rebecca Renard-Wilson (Think. Create. Engage.), Tuba Özkan-Haller (Oregon State), Stephanie Goodwin (Wright State)
Wednesday, January 15, 2020

**AWM Women in Symplectic and Contact Geometry (AWM Sponsored*)**
8am-10:50am and 2:15pm-6:05pm, Room 105, Colorado Convention Center
Organizers: **Melissa Zhang** (University of Georgia), **Morgan Weiler** (Rice University), **Catherine Cannizzo** (Simons Center for Geometry and Physics)

**AWM Women in Math Biology (AWM Sponsored*)**
8:00-11:00AM and 2:15-6:15PM (lunch TBA), Room 112, Colorado Convention Center
Organizers: **Christina Edholm** (Scripps College), **Amanda Laubmeier** (University of Nebraska - Lincoln), **Katharine Gurski** (Howard University), **Heather Zinn Brooks** (University of California, Los Angeles)
We will also be organizing a lunch on Wednesday after the morning session to discuss and connect. If you are interested please join the WIMB listserv (email wimb+subscribe@awm-math.org).

**AMS-AWM Special Session on Women in Topology (AWM Sponsored*)**
Session I: Wednesday 8:00-10:50AM Room 405, Colorado Convention Center
Session II: Saturday 1:00-5:50PM Room 105, Colorado Convention Center
Organizer: **Jocelyn Bell** (Hobart and William Smith Colleges), **Rochy Flint** (Columbia University Teachers College), **Candice Price** (Smith College), **Arunima Ray** (Max Planck Institute for Mathematics)

**AWM Executive Committee Meeting**
9:00am-1:30pm, Capitol Ballroom 7, Hyatt Regency Denver
AWM Annual Executive Committee Meeting. All former AWM President’s are invited to attend. Please reach out to AWM Executive Director to let her know you are attending. karoline@awm-math.org

**AWM Booth**
12:15pm-5:30pm, Exhibits Booth 918, Colorado Convention Center
Interested in volunteering at the AWM booth? Contact Karoline at karoline@awm-math.org.

---

**AWM Panel Discussion Queer Families and Mathematical Careers**
2:15-3:40pm, Room 201, Colorado Convention Center
Balancing a career in math with having a family is something that gets discussed a lot in women in math spaces, but those discussions often leave out the experiences particular to LGBTQ mathematicians and our families. Our goal with this panel is to broaden the conversation about the interaction between family and career to include and represent queer families. In this discussion we will have an expansive, inclusive definition of family. Families may have kids or no kids, one adult or several adults, be genetically related or not, etc. The types of connections that exist in queer families are not always perceived as familial. Even when they are recognized, it can often feel like you’re forging your way through uncharted territory. What family considerations get taken into account when making academic career decisions? How does being queer impact these considerations?

**Alice Mark**, Organizer and Moderator, Vanderbilt University
**Corrin Clarkson**, Organizer, New York University
**Alexander Hoover**, Organizer, University of Akron
- **Amanda Folsom**, Amherst College
- **May Mei**, Denison University
AWM Business Meeting
3:45pm-4:15pm, Room 201, Colorado Convention Center
We invite all AWM Members to attend, and this meeting is open to the public. We 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.
Thursday, January 16, 2020

AWM-AMS Noether Lecture
10:05-10:55am, Four Seasons Ballroom 2-4, Colorado Convention Center
Birgit Speh, Cornell University, will be speaking on **Branching Laws for Representations of Non Compact Orthogonal Groups.** (At Right: Speh at MFO Oberwolfach with T. Kobayashi.)

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](#).

Joint Prize Session
4:25pm-5:25pm, Four Seasons Ballroom 234, Colorado Convention Center
Prizes from several societies will be announced. AWM Awards will be to the following noteworthy women.

- **Melody Chan**, Brown University, Microsoft Research Prize in Algebra and Number Theory
- **Mihaela Ignatova**, Temple University, Sadosky Research Prize in Analysis
- **Erika Camacho**, Arizona State University, Louise Hay Award for Contribution to Mathematics Education
- **Margaret Robinson**, Mount Holyoke College, Gweneth Humphreys Award for Mentorship of Undergraduate Women in Mathematics

AWM Reception and Awards Presentation
6:00pm-7:30pm, Mile High Ballroom 4a-c, Colorado Convention Center
There will be food, drink, music, singing, awesome ladies 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, the Schafer Prize and Dissertation Prize winners, and the AWM Service Award winners!
Friday, January 17, 2020

**AMS-AWM Session on Mathematical and Computational Research in Data Science** (AWM Sponsored*)

Session I: Friday January 17, 2020, 1:00 p.m.-5:40 p.m, Room 407, Colorado Convention Center

Session II: Saturday January 18, 2020, 8:00 a.m.-11:50 a.m, Room 407, Colorado Convention Center

Organizers: Linda Ness (Rutgers DIMACS), F. Patricia Medina (Yeshiva University), Kathryn Leonard (Occidental College). This session is motivated by collaborations built during the 2017 and 2019 ICERM research collaboration workshops at Brown University, launching the Women in Data Science and Mathematics (WiSDM) Research Network. Please send an email to wisdm+subscribe@awm-math.org if you want to be added to the WiSDM group.

---

**AWM Wikipedia Edit-A-Thon**

9:00am-1:00pm, Capitol Ballroom 5, Hyatt Regency Denver

AWM will be hosting a Wikipedia Edit-a-Thon to improve and create new articles on Wikipedia about women in mathematics as well as their accomplishments. Come, share your expertise and improve the representation of women mathematicians on Wikipedia. New to editing Wikipedia? It's easier than you think! We will have experienced Wikipedians who can help you start editing.

Join us anytime from 9am to 1pm, and stay for as long (or short) as you like. We’ll have coffee, internet access, and suggestions for articles to edit. Please bring a laptop or tablet and some curiosity. See our meet-up page for more information: [https://en.wikipedia.org/wiki/Wikipedia:Meetup/AWM/JMM2020](https://en.wikipedia.org/wiki/Wikipedia:Meetup/AWM/JMM2020)

---

**AWM Workshop Poster Presentations by Women Graduate Students and Reception**

5pm - 6:15 pm, Upper Lobby D, Colorado Convention Center

**Poster Session Organizers**

- Loredana Lanzani (Syracuse University)
- Radmila Sazdanovic (North Carolina State)
- Liz Vivas (Ohio State University)
- Yusu Wang (Ohio State University)

**Poster Judging Coordinator** Emilie Wiesner (Ithaca College)

**JMM Poster Judges Needed:** We are currently recruiting for judges. 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 Emilie Wiesner to volunteer (ewiesner@ithaca.edu). Poster judging will be **January 18** from **4:15-5:15PM**.

**Graduate Student Poster Presenters**

- Lale Asik, Texas Tech University, **Stoichiometric Knife-Edge Model on Discrete Time Scale**
- Juliette Bruce, University of Wisconsin-Madison, **Semi-Ample Asymptotic Syzygies**
• Minyoung Jeon, Ohio State University, *Multiplicities of Schubert varieties in the symplectic flag varieties*
• Mari Kawakatsu, Princeton University, *Self-organized division of labor leads to behavioral contagion in mixed social groups*
• Thanittha Kowan, Florida State University, *Classification on Planar Polygonal Complexes*
• Sabine Lang, University of Utah, *Projective cases for the restriction of the oscillator representation to dual pairs*
• Janina Letz, University of Utah, *Smallness properties and locally complete intersections*
• Freda Li, Wesleyan University, *Strictly SnS-regular Hermitian lattices*
• Aida Maraj, University of Kentucky, *Quantitative Properties of Ideals arising from Hierarchical Models*
• Maggie Miller, Princeton University, *Extending fibrations of knot complements to ribbon disk complements*
• Kit Newton, University of Wisconsin, Madison, *Stability deterioration of diffuse optical tomography in the Bayesian framework*
• Laurel Ohm, University of Minnesota, *Theoretical justification and error analysis for slender body theory*
• Noelle Sawyer, Wesleyan University, *Area and Partial Length Spectrum Data*
• Kritika Singhal, Ohio State University, *Sketching and Clustering Metric Measure Spaces*
• Aleksandra Sobieska Snyder, Texas A&M University, *Counterexamples for Cohen-Macaulayness of Lattice Ideals*
• Elizabeth Sprangel, Iowa State University, *Exponential Domination on SC_n\square P_k$ and infinite grids*
• Mary Vaughan, Iowa State University, *Fractional derivatives and Laplacians in one and two-sided weighted Sobolev spaces*
• Julianna Vega, University of Kentucky, *Lattice Polytopes arising from Schur Polynomials and Symmetric Grothendieck Polynomials*
• Emily Winn, Brown University, *Unified Topological and Geometric Characterization of Genomic Networks Underlying Complex Traits in Genome-wide Association Studies*
Saturday, January 19, 2020

**AWM Workshop: Women in Several Complex Variables** *(WinSCV)*

8:00am-5:00pm, Room 207, Colorado Convention Center

The AWM Workshop on Women in Several Complex Variables (WinSCV) brings together female mathematicians working on Several Complex Variables, focusing on Holomorphic Function Spaces and Complex Dynamics. The workshop serves as a followup of the AIM Workshop for WinSCV at AIM 2019.

**Organizers from AWM’s JMM Committee and the ADVANCE WinCompTop Network:**

Loredana Lanzani, Syracuse University.
Liz Vivas, Ohio State University.

9:00-9:40 Mei-Chi Shaw, University of Notre Dame, *Holomorphic approximation via Dolbeault cohomology*

10:00-10:30 Purvi Gupta, Rutgers University, *On the stability of the hull(s) of an n-sphere in $\mathbb{C}^n$ via a nonlinear Riemann-Hilbert problem*

10:30-11:00 Tania Firsova, Kansas State University, *Critical locus for complex Henon maps*

11:00-11:30 Kate Brubaker, Purdue University, *Uniform estimates for the Monge-Amp`ere foliation on a compact K`ahler manifold*

11:30-12:00 Natalya Goncharuk, Cornell University, *Polynomial foliations of $\mathbb{C}^2$: cheap complex limit cycles and leaves of high genus*

12:00-12:30 Jue Xiong, Ohio State University, *Neumann boundary condition for $\bar{\partial}$*

**Mentoring Lunch**

14:00-14:40 Malabika Pramanik, University of British Columbia at Vancouver, *On geometric and computational aspects of Bergman kernel estimates*

15:00-15:30 Sara Lapan, U. of California Riverside, *Existence of attracting domains in $\mathbb{C}^3$ for some holomorphic maps tangent to the identity*

15:30-16:00 Yuan Zhang, Purdue University at Fort Wayne, *$H^\infty$ solutions to $\bar{\partial}$ problem on product domains in $\mathbb{C}^n$*

16:00-16:30 Kyounghee Kim, Florida State University, *Entropy of real rational surface automorphisms*

16:30-17:00 Anne-Katrin Gallagher, Gallagher Tool and Instrument, *The Poincare-Dirichlet inequality for planar domains*

**AWM Math and Motherhood** *(AWM Sponsored)*

Saturday, January 18, 2020, 1:00 - 6:00 p.m., Colorado Convention Center, Room 403

Organizers: **Emille Lawrence** (University of San Francisco), **Della Dumbaugh** (University of Richmond), **Carrie Diaz Eaton** (Bates College) *The last session is a Town Hall panel and discussion.*
The AWM 2020 JMM Organizing Committee

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

- **Alina Bucur** (Meetings Coordinator), UC San Diego
- **Loredana Lanzani**, Syracuse University
- **Alice Mark**, Rutgers University
- **Radmila Sazdanovic** (Chair), North Carolina State University
- **Liz Vivas**, Ohio State University
- **Emilie Wiesner**, Ithaca University

Additional Events of Interest

**Invited Addresses.** Check out the [full list of invited addresses here](#), featuring many friends of AWM and former committee members and award winners!

**AWM Sponsored Sessions.** AWM Sponsored Sessions are affiliated with AWM programs, often the AWM Research Collaboration Networks, and are committed to showcasing the work of women in the mathematical sciences. If you see a research network that you would like to join, reach out! Don’t know where to start? Check out [www.awmadvance.org](http://www.awmadvance.org) or email [awm@awm-math.org](mailto:awm@awm-math.org).