AWM Events at the 2023 SIAM OP/ACDA

AWM will be in Seattle, Washington!

Did you know that AWM annually has a presence at the SIAM annual meeting? When that meeting alternates with CSE and it is international (like CSE was this year in Amsterdam!), AWM holds its SIAM workshop at a conference in the U.S. (this year at SIAM Conference on Optimization).

Keep this in mind as you plan your 2023 SIAM! Reach out with questions to learn more about each activity, and check out the AWM Website for more info.

Wednesday, May 31, 2023

AWM Workshop: Poster session

Chairs:
Chrysoula Tsogka, University of California, Merced
Noemi Petra, University of California, Merced

6:30pm - 8:30pm, Grand Ballroom Foyer, 2nd Floor Sheraton Grand Seattle

AWM’s Minisymposium for graduate students and recent PhD recipients

Graduate Student Poster Presenters:

- Tongtong Li, Dartmouth College, Using Bayesian Spectral Reprojection to Resolve the Gibbs Phenomenon
- Shraddha Verma, George Mason University, Data Assimilation for Quantum Nv Diamond Spectroscopy
- Alysha Toomey, University of California, Riverside, Multicellular Model for Morphogenesis of Pavement Cells in Plant Leaves
- Farjana Siddiqua, University of Pittsburgh, Numerical Analysis of a Corrected Smagorinsky Model
- Jennifer Rangel Ambriz, University of Notre Dame, Combined Modeling and Experimental Study of Shape Formation of the Drosophila Drosophila Wing Imaginal Disc
- Trang Nguyen, Wayne State University, *Optimization of Control Free Time Sweeping Processes and Applications*
- Teressa Chambers, *The Computational Performance of Iterated Linear Optimization*
- Rachael M. Alfant, Rice University, *Multistage Stochastic Mixed-Integer Programming Using DSP*
- Xinhong Liu, University of Notre Dame, *Data Analytics for Membrane Material Innovations*
- Jialu Wang, University of Notre Dame, *Characterizing the Pareto Optimal Trade-off Between Model-Based Information Content and Measurements Cost*
- Maria Dascalu, University of Massachusetts, *Tropicalization of Graph Profiles for Some Classes of Trees*
- Awa Traore, The University of Alabama, *Dynamics of a Multi-Layer Fluid System*

**Thursday, June 01, 2023**

**AWM Workshop: Minisymposium on Inverse Problems**

**Organizers AWM’s SIAM Committee:**
- Chrysoula Tsogka, University of California, Merced
- Noemi Petra, University of California, Merced

**Part I**

9:15 am - 9:40 am, Daniela Calvetti, Case Western Reserve University  
*Bayesian sparse optimization for large scale dictionary learning*

9.45 am - 10:10 am, Andrea Arnold, Worcester Polytechnic Institute  
*Bayesian Filtering Schemes to Estimate Time-Varying Parameters in Dynamical Systems*

10:15 - 10:40 am, Malena Sabate Landman, Emory University  
*Regularization by Inexact Krylov Methods with Applications to Semi-Blind Deblurring*

**Part II**

11:15 am - 11:40 am, Shari Moskow, Drexel University  
*The Lippmann Schwinger Lanczos algorithm for inverse scattering problems*

11:45 am - 12:10 pm, Alison Malcolm, Memorial University, Newfoundland, Canada; Rajiv Kumar and Changxiao Sun  
*Normalizing Flows for Uncertainty Quantification in Seismic Imaging*

12:15 pm - 12:40 pm, Chrysoula Tsogka, University of California, Merced, U.S.; Miguel Moscoso, Universidad Carlos III de Madrid, Spain; Alexei Novikov, Pennsylvania State University, U.S.; George C. Papanicolaou, Stanford University, U.S.  
*Phase and absorption contrast imaging using intensity measurements*

**Mentoring Lunch: An invited lunch for AWM Mentors, Judges, and Graduate Student Workshop Participants and Invited Guests**

*Thursday, June 1 from 12:45pm - 1:45pm, Madrona Room at the Sheraton Grand Seattle, Seattle*
Part III
3:15 pm - 3:40 pm, Fatma Terzioglu, North Carolina State University
   Optimal parameter design for multi-energy computed tomography technique
3:45 pm - 4:10 pm, Mirjeta Pasha, Arizona State University
   Modern Challenges in Large-Scale and High Dimensional Data Analysis

#AWMBooth

Please consider volunteering to staff the AWM booth for a 2 hour block. This is a great opportunity to meet other women in math, as well as learn (and share!) more about the many opportunities within AWM. If you are interested, please email ed.admin@awm-math.org to sign up.

The AWM 2023 SIAM Organizing Committee

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

Lorena Bociu (Chair), North Carolina State University
Katherine Benson, University of Wisconsin - Stout
Daniela Ferrero, Texas State University
Malgorzata Peszynska, Oregon State University
Noemi Petra, University of California, Merced
Chryssoula Tsogka, University of California, Merced
Alexandria Volkening, Purdue University
Heather Zinn Brooks, Harvey Mudd College