

## SIAM Student Days at AN22

Student Days is an event for students and about students. Organizers have got it all covered this year, with activities and sessions where students can meet with both peers and professionals in their field, social events, and network with SIAM Student Chapters from all over the world.

**\*must-see events for students**

*Social event hosted by local SIAM Chapters*

| Sunday, July 10         |  |   |
|-------------------------|--|---|
| 5:00PM - 6:00PM         | <b>Student Days: Orientation</b>   | <b>306/307</b>                          |
| 6:00PM - 8:00PM         | Welcome Reception  | South Terrace - 3rd Floor               |
| <i>8:00PM - ?</i>       | <i>Local Student Chapters host a student pub crawl</i>   | <i>SIAM Registration Area</i>           |
| Monday, July 11         |  |   |
| 8:30AM - 10:30AM        | MS11 Student Days: Undergraduate Research Presentations - Part I of III  | 412                                     |
| 10:45AM - 11:45AM       | IP1 Opening Remarks and Presentation: Probability, Sports, and Public Policy - Anette "Peko" Hosoi, Massachusetts Institute of Technology, U.S.  | Spirit of Pittsburgh A                  |
| 11:45AM - 12:30PM       | JP1 Joint Plenary with the SIAM Conference on Applied Mathematics Education (ED22): Building Mathematical Communities of Students, Faculty, and the Public to Create Pathways from K-12 to Graduate Programs - Cristina Villalobos, University of Texas, Rio Grande Valley | Spirit of Pittsburgh A                  |
| 2:00PM - 2:45PM         | IP2 Machine Learning Frameworks for Discovering Biophysical Signatures in 3D Shapes and Images - Lorin Crawford, Microsoft Research, U.S.  | Spirit of Pittsburgh A                  |
| 2:45PM - 3:30PM         | <b>SP1 AWM-SIAM Sonia Kovalevsky Lecture: Two of my Favorite Problems - Anne Greenbaum, University of Washington, U.S.</b>   | <b>Spirit of Pittsburgh A</b>           |
| 4:00PM - 6:00PM         | MS25 Student Days: Undergraduate Research Presentations - Part II of III   | 412                                     |
| 6:15PM - 7:15PM         | <b>PD1 Industry Panel: Shedding Light on Opportunities for Mathematicians in BIG (Business-Industry-Government) Careers</b>  | <b>Spirit of Pittsburgh A</b>           |
| 7:15PM - 9:15PM         | <b>Graduate Student Reception and Industry Reception</b>   | <b>Allegheny Overlook<br/>3rd Floor</b> |
| Tuesday, July 12        |  |   |
| 7:00AM - 8:15AM         | Student Days: Student Chapter Meeting with SIAM Leadership (by invitation only)  | 301-303                                 |
| 8:30AM - 10:30AM        | MS36 Student Days: Student Chapter Presentations - Part I of II  | 310/311                                 |
| 8:30AM - 10:30AM        | MS37 Student Days: Undergraduate Research Presentations - Part III of III  | 412                                     |
| 11:00AM - 11:45AM       | IP3 Living With Complexity: Pragmatic Approaches to Performance - William D. Gropp, University of Illinois at Urbana-Champaign, U.S.   | Spirit of Pittsburgh A                  |
| 11:45AM - 12:30PM       | IP4 High Dimensional Data Completion: Models, Algorithms and Applications - Michael Ng, The University of Hong Kong, Hong Kong   | Spirit of Pittsburgh A                  |
| 12:30PM - 2:30PM        | Prizes and Awards Luncheon (ticketed event; separate fee applies)  | 301-303                                 |
| <i>12:30PM - 2:30PM</i> | <i>Local Student Chapters host a lunch in downtown Pittsburgh</i>  | <i>SIAM Registration Area</i>           |
| 2:30PM - 3:30PM         | <b>SP2 John Von Neumann Prize Lecture: Patterns, Waves, and Bifurcations in Single and Collective Cell Migration - Leah Edelstein-Keshet, University of British Columbia, Canada</b>   | <b>Spirit of Pittsburgh A</b>           |
| 3:30PM-4:00PM           | <b>Student Chapter Office Hours – Have questions? Get Answers!</b>   | <b>Near Registration</b>                |
| 4:00PM - 6:00PM         | MS52 Student Days: Student Chapter Presentations - Part II of II   | 310/311                                 |
| 6:15PM - 7:15PM         | SIAM Business Meeting  | Spirit of Pittsburgh A                  |
| 7:45PM - 8:45PM         | Fellows Recognition and Reception  | South Terrace - 3rd Floor               |
| 8:00PM - 10:00PM        | <b>PP1 Poster Session and Dessert Reception, MP1 AWM Workshop; Poster Session, MP2 Recent Advances in Immersed Boundary Simulations</b>  | <b>West Atrium - 3rd Floor</b>          |

# SIAM Student Days at AN22

Wednesday, July 13

|                   |   |                        |
|-------------------|---|------------------------|
| 8:30AM - 10:30AM  | MS63 Student Days: Student Paper Prize Winner Presentations   | 310/311                |
| 8:30AM - 10:30AM  | MS65 Tutorials for Students: Accessible Introductions to Active Research Areas  | 318                    |
| 10:30AM-11:00AM   | Student Chapter Office Hours – Have questions? Get Answers!   | Near Registration      |
| 11:45AM - 12:30PM | JP2 Joint Plenary Speaker with the SIAM Conference on the Life Sciences: Machine Learning and Sparse Modeling for Scientific Discovery, with Examples in Fluid Mechanics - Steven Brunton, University of Washington, U.S. | Spirit of Pittsburgh A |
| 2:00PM - 3:00PM   | SP3 Past President's Address: Complex Environments and Complex Shapes: Perspectives on Biofluid Models at the Microscale - Lisa J. Fauci, Tulane University, U.S.   | Spirit of Pittsburgh A |
| 3:00PM - 3:30PM   | SP4 W. T. and Idalia Reid Prize Lecture: Control and Machine Learning - Enrique Zuazua, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany  | Spirit of Pittsburgh A |
| 3:30PM - 4:00PM   | Nick Trefethen Book Signing   | SIAM Books Booth       |
| 4:00PM - 6:00PM   | MS79 Tutorials for Students: Accessible Introductions to Active Research Areas  | 318                    |
| 6:15PM - 7:15PM   | SP5 I. E. Block Community Lecture: Artificial Intelligence and Cryptography: Privacy and Security in the AI Era - Kristin Lauter, Facebook AI Research, U.S.  | Spirit of Pittsburgh A |
| 7:15PM - 8:45PM   | Community Reception   | Rooftop                |

Thursday, July 14

|                   |  |                        |
|-------------------|--|------------------------|
| 8:30AM - 10:30AM  | MS92 Student Internships in the US National Laboratories: Experiences and Opportunities  | 318                    |
| 11:00AM - 11:45AM | IP6 Mathematical Analysis of Atmospheric and Oceanic Dynamics Models: Cloud Formation and Sea-Ice Models - Edriss S. Titi, Cambridge University, UK, Texas A&M University, U.S., and Weizmann Institute of Science, Israel | Spirit of Pittsburgh A |
| 11:45AM - 12:30PM | JP3 Joint Plenary Speaker with the SIAM Conference on Mathematics of Planet Earth (MPE22): How Machine Learning can Improve Projections of Future Climate - Emily Shuckburgh, University of Cambridge, United Kingdom      | Spirit of Pittsburgh A |
| 2:00PM - 2:45PM   | IP7 Finite Dimensional Approximations of Hamilton-Jacobi-Bellman Equations in Spaces of Probability Measures and Stochastic Optimal Control of Particle Systems - Andrzej J. Swiech, Georgia Institute of Technology, U.S. | Spirit of Pittsburgh A |
| 3:00PM - 3:30PM   | SP6 Julian Cole Lectureship: Strong Localized Perturbation Theory for the Analysis of Localized Solutions to Some Nonlinear Diffusive Systems - Michael J. Ward, University of British Columbia, Canada                    | Spirit of Pittsburgh A |
| 4:00PM - 6:00PM   | MS105 Student Days: An Informal Meeting with the Co-chairs and Invited Speakers  | 304                    |
| 4:30PM - 5:00PM   | SIAM Books giveaway  | SIAM Books Booth       |

Friday, July 15

|                   |   |                        |
|-------------------|---|------------------------|
| 11:00AM - 11:45AM | IP8 Optimization and Learning with Zeroth-Order Stochastic Oracles - Stefan Wild, Argonne National Laboratory, U.S.                             | Spirit of Pittsburgh A |
| 11:45AM - 12:30PM | IP9 How Mathematics Enables Science: A Theoretical Biologist's Experience - Wilfred Ndifon, African Institute for Mathematical Sciences, Rwanda | Spirit of Pittsburgh A |
| 1:45PM - 2:45PM   | IP10 Closing Remarks and Invited Presentation: Physics-Informed Machine Learning - Rebecca Willett, University of Chicago, U.S.                 | Spirit of Pittsburgh A |

## Local Attractions

## Local Restaurant Recommendations

[Point State Park](#)  
[Market Square](#)  
[The Duquesne Incline](#)  
[Strip District](#)  
[The Andy Warhol museum](#)

Bakersfield  
 Bae Bae's Kitchen (counter-served)  
 Con Alma Downtown (dinner only)

Nicky's Thai Kitchen  
 Mike & Tony's Gyros (counter-served)  
 Gaucho Parrilla Argentina (dinner only)