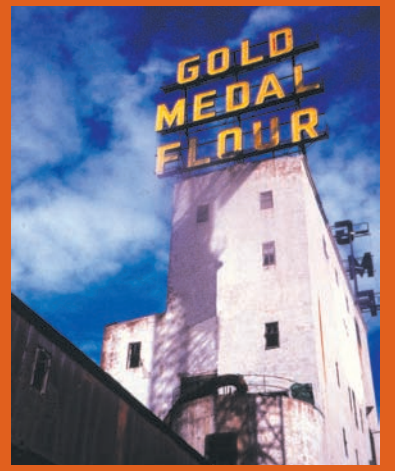


Join SIAM in Minneapolis

www.siam.org/meetings/an12



Invited Speakers

Gunnar Carlsson, ** *Stanford University*
Tony Chan, *Hong Kong University of Science and Technology, Hong Kong*
Ernesto Estrada, *University of Strathclyde, UK*
Michael Heroux, *Sandia National Laboratories, USA*
Kristin Lauter, *Microsoft Research, USA*
Claude LeBris, *Ecole des Ponts and INRIA, France*
Simon A. Levin, *Princeton University, USA*
Pierre-Louis Lions, *College de France, France*
George Papanicolaou, * *Stanford University, USA*
Helmut Pottmann, *KAUST, Saudi Arabia*
Keith Promislow, *Michigan State University, USA*
Yousef Saad, *University of Minnesota, USA*
Timothy Scheibe, *Pacific Northwest National Laboratory, USA*
Emily Shuckburgh, *British Antarctic Survey, UK*
Valeria Simoncini, *Università di Bologna, Italy*
Richard Tapia, *Rice University, USA*
Karen Willcox, *** *Massachusetts Institute of Technology, USA*

* Joint speaker with the SIAM Conference on Financial Mathematics and Engineering.
** American Mathematical Society (AMS) Invited Address
*** Institute for Mathematics and its Applications (IMA) Invited Address

Special Lectures

AWM-SIAM Sonia Kovalevsky Lecture
Barbara Lee Keyfitz, *The Ohio State University, USA*

The John von Neumann Lecture
John Ball, *University of Oxford, UK*

SIAM Past President's Address
Douglas Arnold, *University of Minnesota, USA*

W. T. and Idalia Reid Prize in Mathematics Lecture
Ruth F. Curtain, *University of Groningen, The Netherlands*

Prizes and Awards Luncheon

The following prizes and awards will be presented at the luncheon on Tuesday, July 10, 12:30—2:30 PM:

Recognition of the Class of 2012 SIAM Fellows
The John von Neumann Lecture
I. E. Block Community Lecture
The AWM-SIAM Sonia Kovalevsky Lecture
Richard C. DiPrima Prize
Lagrange Prize in Continuous Optimization (awarded jointly with MOS)
George Pólya Prize
W. T. and Idalia Reid Prize
SIAG/FME Junior Scientist Prize
SIAM Award in the MCM (2011 and 2012 winners)
SIAM Outstanding Paper Prizes
SIAM Student Paper Prize (2011 and 2012 winners)
SIAM Prize for Distinguished Service to the Profession

Tutorial

Mathematical Modeling of Interest Rates: Challenges and New Directions
Fabio Mercurio, *Bloomberg Research, New York*
Sunday, July 8, 2012



Organizing Committee

Co-chairs

Michele Benzi, *Emory University, USA*
Tasso Kaper, *Boston University, USA*

Organizing Committee

Kaushik Bhattacharya, *California Institute of Technology, USA*
Susanne Brenner, *Louisiana State University, USA*
Rene Carmona, *Princeton University, USA*
Anshul Gupta, *IBM Research, USA*
Misha Kilmer, *Tufts University, USA*
Jorg Peters, *University of Florida, USA*
Alfio Quarteroni, *Ecole Polytechnique Federale de Lausanne, Switzerland and Politecnico di Milano, Italy*
Frank Sottile, *Texas A&M University, USA*
Cristina Villalobos, *The University of Texas-Pan American, USA*
Carol Woodward, *Lawrence Livermore National Laboratory, USA*
Mary Lou Zeeman, *Bowdoin College, USA*

I. E. Block Community Lecture

Wednesday, July 11, 6:15—7:15 PM

Creating Reality: The Mathematics Behind Visual Effects
Robert Bridson, *The University of British Columbia, Canada*
Community Reception follows immediately after

Exhibits

Publishers, software and hardware suppliers, and service organizations that have products to offer to conference attendees are invited to exhibit. For additional information and exhibit fees, please contact the SIAM marketing representative at marketing@siam.org.

Workshop Celebrating Diversity (WCD)

Organizers

Tanya Moore, *Building Diversity in Science*
Cristina Villalobos, *University of Texas-Pan American, USA*
Talitha Washington, *University of Evansville, USA*

This annual event provides a forum for scientific interaction among a truly diverse group of participants. A majority of speakers will be women and members of underrepresented groups, ranging from beginning graduate students to senior scientists. Everyone is welcome to attend the talks of these symposia, which will be scheduled throughout the week.

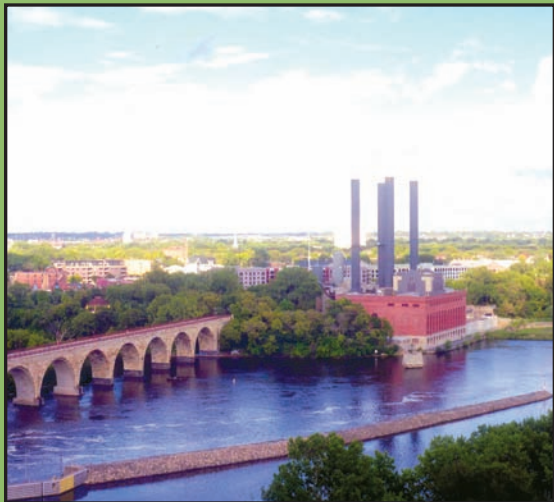
Professional Development Workshop

COACHing Strong Women in the Art of Strategic Persuasion
Two professional development workshops designed to help women be more effective in leading or participating in discussions, meetings, and group negotiations will take place on Sunday, July 8, 2012.

The morning half-day session is open to senior faculty women, associate and full professors, or equivalent rank in government labs/industry. The afternoon session is open to junior faculty level women, postdoctoral fellows, senior graduate students, or equivalent level in government labs/industry.

Pre-registration preferred before June 11, 2012. For more information, please visit:

<http://www.siam.org/meetings/an12/workshops.php#coach>



Minneapolis images courtesy of Minneapolis Visitors and Convention Bureau



Hotel Information

Hyatt Regency Minneapolis
1300 Nicollet Mall
Minneapolis, Minnesota, USA 55403
Direct Telephone: +1-612-370-1234

SIAM Conference on Financial Mathematics & Engineering

July 9-11, 2012
Hyatt Regency Minneapolis
Minneapolis, Minnesota, USA

The 2012 SIAM Annual Meeting is being held in conjunction with the SIAM Conference on Financial Mathematics and Engineering (FM12).

Register

Register online at
www.siam.org/meetings/an12reginfo.php.



Society for Industrial and Applied Mathematics
3600 Market Street, 6th Floor • Philadelphia, PA 19104-2688 USA
www.siam.org • siam@siam.org

Students

Activities just for you at the 2012 SIAM Annual Meeting



Student Days at the 2012 SIAM Annual Meeting are for students and about students. Organizers have planned activities and sessions where students can meet with both peers and professionals in their field, participate in a career fair, attend an information session on hot areas for jobs and research, and network with members of SIAM Student Chapters from all over the world.

Goals

Organized by the SIAM Education Committee (Chaired by Peter Turner, *Clarkson University*), Student Days are designed to encourage student participation in SIAM, help students learn more about applied mathematics and computational science as both fields of study and as careers, and provide a forum for emerging mathematicians to learn about their field from professionals. Organizers also hope to encourage those in the learning community to establish new student chapters of SIAM and to promote interaction between students and SIAM leadership.

Events and Happenings

Student Days sessions include presentations by student chapter representatives and winners of the SIAM Award in the Mathematical Contest in Modeling (MCM) and the SIAM Student Paper Prizes. This year new activities have been added that will enhance the meeting for students, including a special orientation prior to Sunday's welcome reception, a student lounge, a session for students with selected conference invited speakers, and a session on undergraduate research in applied and computational mathematics.

Meeting with Leaders and Influencing SIAM (by invitation only)

Student Days 2012 will also feature the Student Chapter Meeting with SIAM Leadership. This meeting gives faculty advisors and student chapter representatives the opportunity to meet with key decision makers to discuss ideas for improving student chapters and ways that SIAM can meet the needs of current and future student members all over the world. Each chapter selects one student to attend the event as its representative.

Finding Jobs for You

Monday, July 9, features events to help students find jobs and develop their careers. An industry panel organized by SIAM Vice President for Industry Thomas Grandine will offer insights into what it's like to work in industry. The panel will be followed by a Career Fair and a reception for industry representatives and graduate students. Prospective employees can meet government and industry representatives and find what each employer has to offer.

Developing Skills

Professional development evening is Thursday, July 12. In addition to a panel discussion, there will be an opportunity to network with professionals in the field. You might also be interested in attending the Association for Women in Mathematics (AWM) workshop for graduate students and recent PhD's.

Reservations

Reserve your room at the Hyatt Regency Minneapolis. The hotel has a limited number of rooms available at special rates for students. The deadline to make hotel reservations is June 8, 2012. Since reduced rate student rooms often sell out prior to the deadline, we recommend that you make your reservations early!

Student Days Schedule and Other Activities of Interest to Students

Students: Visit the student lounge located in the Exhibit Hall! **NEW!**

Sunday, July 8, 2012

5:00 PM—6:00 PM **Student Orientation** **NEW!**
6:00 PM—8:00 PM **Welcome Reception**

Monday, July 9, 2012

10:30 AM—12:30 PM **Undergraduate Research in Applied and Computational Mathematics – 1 of 2**
4:00 PM—6:00 PM **Undergraduate Research in Applied and Computational Mathematics – 2 of 2**
6:15—7:15 PM **Industry Panel**
7:15—9:15 PM **Career Fair, Graduate Student Reception**

Tuesday, July 10, 2012

7:00 AM—8:15 AM **Student Chapter meeting with SIAM Leadership** (by invitation only)
8:30 AM—10:00 AM **AN12 and FM12 Invited Speaker Sessions**
10:00 AM—10:30 AM **Coffee break**
10:30 AM—12:30 PM **SIAM Student Chapter Presentations**
Organizer: Peter Turner, *Clarkson University*

Numerically Optimal High Order Strong Stability Preserving Multi-step Runge-Kutta Methods
Zachary Grant, *University of Massachusetts at Dartmouth*

A Mathematical Approach to the Future of the Cavendish Banana
Blake Burkett, *Shippensburg University*

Simulation of Deformations and Shape Recovery of Red Blood Cells Using the Lattice Boltzman Method
John Gounley, *Old Dominion University*

Modeling of the Dynamic Delamination of L-shaped Unidirectional Laminated Composites
Burak Gozluklu, *Middle East Technical University*

Simulating Two-Phase Flows in Fractured Reservoirs Using a Generic Transfer Function in a Dual-Porosity Model
Christine Maier, *Heriot-Watt University*

An Analytical Approach to Green Oxidation
Diego Torrejon, *George Mason University*

12:30 PM—2:30 PM **Prizes and Awards Luncheon**
2:30 PM—3:30 PM **John von Neumann Lecture**
3:30 PM—4:00 PM **Coffee break**
4:00 PM—6:00 PM **Students informal meeting with Invited Speakers** **NEW!**
8:00 PM—10:00 PM **Joint Poster Session (AN12, AWM, FM12) and Dessert Reception**

Wednesday, July 11, 2012

10:30 AM—12:30 PM **SIAM/MCM Award winners presentations (2011, 2012)**
4:00 PM—6:00 PM **SIAM Student Paper Prize winners presentations (2011, 2012)**

Thursday, July 12, 2012

4:00 PM—4:30 PM **SIAM Book Giveaway — Exhibit Hall — STUDENTS ONLY**



Register: Students

Register online at www.siam.org/meetings/an12reginfo.php. Students can pre-register for the meeting at the reduced rate of \$110 (or \$125 onsite.) Student Days are included.