# SIAM Unwrapped - January 2015

News & announcements for the SIAM membership community

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Dear SIAM members,

Here's wishing you a happy and prosperous New Year 2015!

View our 2015 brochure to review the new and exciting things to expect from SIAM this year.

Also visit our <u>conference calendar</u> to view a list of 2015 and future meetings. As always, you can follow us on <u>Twitter</u> or <u>Google Plus</u> and like us on <u>Facebook</u> to stay abreast of new events, activities and updates. SIAM has a <u>new LinkedIn page</u>! Be sure to follow us and participate in the conversation.

Regards,	
Karthika Swamy Cohen	
Editor	

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# **Welcoming new Activity Group officers**

SIAM is pleased to announce new officers for several activity groups. Officers began their terms on January 1 and will serve 2-year terms through the end of 2016.

**SIAG on Analysis of Partial Differential Equations** (SIAG/APDE) – Chair: Helena Nussenzveig Lopes; Vice Chair: Dejan Slepcev; Program Director: Lia Bronsard; Secretary: Becca Thomases

**SIAG on Computational Science and Engineering** (SIAG/CSE) – Chair: Lois Curfman McInnes; Vice Chair: Hans De Sterck; Program Director: Jan Hesthaven; Secretary: Suzanne Shontz

**SIAG on Financial Mathematics and Engineering** (SIAG/FME) – Chair: Michael Ludkovski; Vice Chair: Sebastian Jaimungal; Program Director: Tim Leung; Secretary: Alex Schied

**SIAG on Geosciences** (SIAG/GS) – Chair: Carol Woodward; Vice Chair: Juan Restrepo; Program Director: Jorn Behrens; Secretary: Jodi Mead

**SIAG on Life Sciences** (SIAG/LS) – Chair: Richard Bertram; Vice Chair: Sue Ann Campbell; Program Director: Samuel Isaacson; Secretary: Andrea Barreiro

**SIAG on Nonlinear Waves and Coherent Structures** (SIAG/NWCS) – Chair: Thomas Bridges; Vice Chair: Robert Pego; Program Director: Annalisa Calini; Secretary: Jon Wilkening

**SIAG on Uncertainty Quantification** (SIAG/UQ) – Chair: Andrew Stuart; Vice Chair: Serge Guillas; Program Director: Clayton Webster; Secretary: Youssef Marzouk

**SIAG on Education** – Chair: Peter Turner; Vice-Chair: Jeff Humpherys; Secretary: Ben Galluzzo; Program Director: Padhu Seshaiyer

::: CSE15 UPDATES :::	

<sup>&</sup>quot;Communication doctors" booth at CSE15

Have a significant research project that you absolutely love, but begin to see people's eyes glaze over every time you start to talk about it? CSE15 may have an answer for you. During two sessions (held concurrently with the poster sessions) at the 2015 SIAM Conference on Computational Science and Engineering in Salt Lake City in March, a booth of "Communication Doctors" will help you get your research communication ready for the press! Do you have a scientific question, project or visual that you want to turn into a good story? Bring an elevator pitch, 1-3 minutes long, or a summary or visual of your research work, and "doctors" will help you break it down for the lay public and media. Representing mathematicians, science communicators and educators, "doctors" will use a variety of skills to make your pitch media ready. You will also have a chance to meet and interact with science writer Flora Lichtman, whose work has appeared in the New York Times, NPR's Science Friday, and Popular Science, among other outlets and publications.

Visit the booth in Room 255 between 4:30 and 6:30 PM on Sunday, March 15 or Monday, March 16.

#### Student chapters present research at CSE15

For the past 12 years, a select group of SIAM student chapters have been invited to send representatives to the SIAM Annual Meeting as part of Student Days to present their research in special minisymposia sessions organized by the SIAM Education Committee. Since there is no SIAM annual meeting in 2015 in support of ICIAM 2015 in Beijing, chapters have been invited to send representatives to the SIAM Conference on Computational Science and Engineering (CSE15) in March 2015 to present their research and participate in other Student Days activities.

The student chapter presentations at CSE15 will be held on Sunday, March 15, 2015. Please view full details, including topics and location here:

::: STUDENT NEWS & NOTES :::

## SIAM's new student chapters

SIAM is pleased to welcome its latest student chapters:
Michigan Technical University
Saint Mary's College of Maryland
University of Akron
University of Alabama at Birmingham
University of Hamburg, Germany
University of Kentucky
University of Pretoria, South Africa
University of Southern Mississippi
Western New England University

For information on forming a chapter at your school, go to <a href="www.siam.org/students/chapters/start.php">www.siam.org/students/chapters/start.php</a>.

## Students avail of free memberships

A reminder to students that all full-time graduate students attending schools that are <u>academic</u> <u>members of SIAM</u> can join SIAM for free. You may view the list of academic member schools at the above link or on the insert in the January/February issue of *SIAM News*. Is your school an academic member? If so, <u>join now!</u> Undergraduates attending schools that are academic members must be nominated for free membership by a faculty member. Please see full details about student memberships at:

http://www.siam.org/students/memberships.php

::: PUBLISHING NEWS & NOTES :::	
Current student members, don't forget to r	enew.

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**New SIAM Books** 

Vehicle Routing: Problems, Methods, and Applications, Second Edition

Edited by Paolo Toth and Daniele Vigo

Vehicle routing problems, among the most studied in combinatorial optimization, arise in many practical contexts (freight distribution and collection, transportation, garbage collection, newspaper delivery, etc.). Operations researchers have made significant developments in the algorithms for their solution, and *Vehicle Routing: Problems, Methods, and Applications, Second Edition* reflects these advances. The text of the new edition is either completely new or significantly revised and provides extensive and complete state-of-the-art coverage of vehicle routing by those who have done most of the innovative research in the area; it emphasizes methodology related to specific classes of vehicle routing problems and, since vehicle routing is used as a benchmark for all new solution techniques, contains a complete overview of current solutions to combinatorial optimization problems. It also includes several chapters on important and emerging applications, such as disaster relief and green vehicle routing.

Additional information: http://bookstore.siam.org/mo18

2014 / xviii + 463 pages / Softcover / ISBN: 978-1-611973-58-7 / List Price \$119.00 / MOS/SIAM Member Price \$83.30 / Order Code MO18

Stability, Control, and Computation for Time-Delay Systems: An Eigenvalue-Based Approach, Second Edition

Wim Michiels and Silviu-Iulian Niculescu

In this revised edition, the authors make the leap from stabilization to the design of robust and optimal controllers and from retarded-type to neutral-type delay systems, thus enlarging the scope of the book within control; include new, state-of-the-art material on numerical methods and algorithms to broaden the book's focus and to reach additional research communities, in particular numerical linear algebra

and numerical optimization; and increase the number and range of applications to better illustrate the effectiveness and generality of their approach.

Additional information: <a href="http://bookstore.siam.org/dc27">http://bookstore.siam.org/dc27</a>

2014 / xxiv + 435 pages / Softcover / ISBN: 978-1-611973-62-4 / List Price \$114.00 / MOS/SIAM Member Price \$79.80 / Order Code DC27

# **Computational Methods in Geophysical Electromagnetics**

#### Eldad Haber

This monograph provides a framework for students and practitioners who are working on the solution of electromagnetic imaging in geophysics. Bridging the gap between theory and practical applied material (for example, inverse and forward problems), it provides

- a simple explanation of finite volume discretization,
- basic concepts in solving inverse problems through optimization,
- a summary of applied electromagnetics methods, and
- MATLAB code for efficient computation.

Additional information: http://bookstore.siam.org/mn01

2014 / viii + 143 pages / Softcover / ISBN 978-1-611973-79-2 / List Price \$65.00 / Member Price \$45.50 / Order Code MN01

# ::: UPDATES ON CONFERENCES & PRIZES :::

#### Presentations from FM14 available to view

Invited speaker presentations, the Junior Prize speaker presentation, and select minisymposia from the 2014 Conference on Financial Mathematics and Engineering are available online at <a href="https://www.pathlms.com/siam/courses/481">https://www.pathlms.com/siam/courses/481</a>. Presentations from prior meetings are also available on SIAM Presents...Featured Lectures from our Archives <a href="https://www.siam.org/meetings/presents.php">http://www.siam.org/meetings/presents.php</a>.

## **Apply for Gene Golub SIAM Summer School 2015**

The 2015 Gene Golub SIAM Summer School on *RandLA*: Randomization in Numerical Linear Algebra to take place June 15-26, 2015, in Delphi, Greece is now accepting applications. More information can be found at <a href="http://www.cs.rpi.edu//~drinep/G2S3">http://www.cs.rpi.edu//~drinep/G2S3</a> RandNLA 2015/. The application deadline is February 1, 2015. View the <a href="archives">archives</a> for previous schools to learn more.

## Call for Proposals: Gene Golub SIAM Summer School 2016

SIAM is calling for letters of intent proposing topics and organizers for the 2016 Gene Golub SIAM Summer School (G2S3). Preference will be given to a computational linear algebra theme in 2016, but all areas of applied and computational mathematics will be considered. SIAM will contribute up to \$95,000 towards the running of the summer school, with an expected duration of two weeks and 40-50 graduate students. The deadline for letters of intent is January 31, 2015. Full proposals are due March 31, 2015. For more details, and a template for the letter of intent, visit: www.siam.org/students/g2s3/summer\_call.php

## Child Care Grants at two SIAM meetings in 2015

SIAM is offering up to \$250 per family for attendees who bring children to the <u>2015 SIAM Conference on Computational Science and Engineering (CSE15)</u> or the <u>2015 SIAM Conference on Dynamical Systems (DS15)</u>. A description of the kinds of expenses reimbursable can be found under <u>Guidelines for Reimbursable Child Care Expenses</u>.

Deadline for applications for CSE15 grants is January 16, 2015. See <a href="http://www.siam.org/meetings/cse15/childcare.php">http://www.siam.org/meetings/cse15/childcare.php</a>.

Deadline for application for DS15 grants is March 23, 2015. See <a href="http://www.siam.org/meetings/ds15/childcare.php">http://www.siam.org/meetings/ds15/childcare.php</a>

# SIAM conference registrations & submissions

SIAM Conference on Computational Science and Engineering (CSE15), March 14-18, 2015, Salt Lake City, Utah, USA

Pre-registration deadline: January 28, 2013

https://www.siam.org/meetings/cse15/regform.php

<u>The 13th International Symposium on Orthogonal Polynomials, Special Functions and Applications</u> (OPSFA13), June 1-5, 2015, Gaithersburg, Maryland, USA

Abstracts for contributed and minisymposium speakers submissions are due: February 2, 2015 <a href="http://www.siam.org/meetings/opsfa13/submissions.php">http://www.siam.org/meetings/opsfa13/submissions.php</a>

<u>SIAM Conference on Mathematical and Computational Issues in the Geosciences (GS15)</u>, June 29-July 2, 2015, Stanford, California, USA

Abstracts for minisymposia, contributed lectures and poster submissions deadline: January 15, 2015 <a href="http://www.siam.org/meetings/gs15/submissions.php">http://www.siam.org/meetings/gs15/submissions.php</a>

SIAM Conference on Control and Its Applications (CT15), July 8-10, 2015, Paris, France

Minisymposium and abstract deadlines for the meeting have been extended!

Minisymposium proposals: January 19, 2015

Abstracts for contributed and minisymposium speakers: January 28, 2015

http://www.siam.org/meetings/ct15/submissions.php

Full Paper for Consideration in Proceedings: January 28, 2015

http://www.siam.org/meetings/ct15/proceedings.php

Hotel information is now posted at <a href="http://www.siam.org/meetings/ct15/hotel.php">http://www.siam.org/meetings/ct15/hotel.php</a>. It is recommended that attendees make their reservations early.

8th International Congress on Industrial and Applied Mathematics (ICIAM 2015), August 10-14, 2015, Beijing, China

SIAM is offering approximately 100 travel grants, funded by the U.S. National Science Foundation, for individuals traveling from U.S. institutions to ICIAM 2015. The review of applications will begin on January 12. However, SIAM will continue to accept applications until January 30, 2015. Apply now! <a href="http://www.siam.org/meetings/iciam15/">http://www.siam.org/meetings/iciam15/</a>

Submission of accepted minisymposia abstracts due: February 28, 2015

Closing date for poster submission: April 30, 2015

Notification of final decisions on posters: within one month of submission

Submissions site and information at <a href="http://www.iciam2015.cn/Submissions.html">http://www.iciam2015.cn/Submissions.html</a>

Hotel registration is now open: <a href="http://www.iciam2015.cn/Hotels-Tours.html">http://www.iciam2015.cn/Hotels-Tours.html</a>

SIAM Conference on Applied Algebraic Geometry (AG15), August 3-7, 2015, Daejeon, South Korea

Deadline for contributed submissions: January 31, 2015

http://camp.nims.re.kr/activities/eventpages/?id=200&action=minisymposium

Pre-registration deadline: July 10, 2015

http://camp.nims.re.kr/activities/eventpages/?id=200&action=registration

SIAM Conference on Applied Linear Algebra (LA15), October 26-30, 2015, Atlanta, Georgia, USA

Minisymposium proposals submission deadline: March 30, 2015

Abstracts for contributed and minisymposium speaker submission deadline: April 27, 2015

http://www.siam.org/meetings/la15/submissions.php

# **Prize nomination deadlines**

Lagrange Prize in Continuous Optimization: February 1, 2015

SIAM Student Paper Prize: February 15, 2015

Best SICON Paper Prize: February 15, 2015

SIAG/LA Prize: February 15, 2015

For the complete list of the call for nominations, please visit:

http://www.siam.org/prizes/nominations.php

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If your email does not support the hyperlink features, please copy any of the above URLs and paste them into your Internet browser. Questions/comments/suggestions? Send them to <a href="mailto:karthika@siam.org">karthika@siam.org</a>.

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