

SIAM Unwrapped – March 2015

News & announcements for the SIAM membership community



Dear SIAM members,

As you know, SIAM publishes 16 highly-regarded research journals in the fields of applied mathematics and computational science. But do you know some better than others? Do you have colleagues and friends who may not know about the breadth and reach of SIAM journals?

If so, download our [latest journals poster](#) and forward along! Printed versions of the (book shelf end panel sized) poster are also available upon request by emailing Hartner@siam.org. Spread the word about SIAM journals!

Regards,

Karthika Swamy Cohen

Editor

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::: PUBLIC AWARENESS :::

April is Mathematics Awareness Month

Innovation is an increasingly important factor in the growth of world economies, and this is especially so in key economic sectors like manufacturing, materials, energy, biotechnology, healthcare, networks, and professional and business services. As new systems and methodologies become more complex, advances and applications in the mathematical sciences have become drivers of innovation. As math drives innovation, it also drives careers.

That is the theme for this year's Mathematics Awareness Month, April 2015. Visit the website to read about real people using math to drive their careers: <http://www.mathaware.org/index.html>

[Order a poster](#) to raise awareness!

US high schoolers contemplate if college is worth the cost

It's likely that high-school students consider this question already. But the more than 5,000 students who deliberated on this topic this month did much more than merely weigh the pros and cons of a college education. Participants in the 2015 Moody's Mega Math (M³) Challenge, they used mathematical models to quantify and consider the price paid, expected earnings, and lifestyle factors resulting from the attainment of an undergraduate education. As part of the intensive Challenge Weekend, students working in teams of 3-5 spent 14 hours gathering data on tuition costs, debt burden, and labor statistics, and comparing the earning potential of various career paths, including those of STEM vs. non-STEM graduates. Over 200 SIAM members and applied professionals are now reading and scoring submissions to determine the winners of the \$125,000 total scholarship prizes to be awarded in April.

View the full problem statement at <http://m3challenge.siam.org/monthly-dialogue/2015-challenge-problem>. For more information about the Challenge, visit <http://m3challenge.siam.org/>.

::: SIAM HQ UPDATE :::

New activity group on Mathematics of Planet Earth

SIAM has a brand new activity group. The [SIAG on Mathematics of Planet Earth \(SIAG/MPE\)](#) will provide a forum for mathematicians and computational scientists to study Planet Earth, its life-supporting capacity, and the impact of human activities. By opening up a new area of applications, the SIAG

anticipates that it will inspire exciting research in the mathematical sciences. Activities of the SIAG will include the biennial SIAM Conference on Mathematics of Planet Earth, as well as minisymposia at SIAM Annual Meetings and related conferences.

Those who have already renewed for 2015 can visit https://my-helper.siam.org/forms/join_siag.htm, or call customer service to join SIAG/MPE. Students (who are eligible for two free SIAG memberships) can email membership@siam.org. 2014 members who have not renewed for 2015 yet can join SIAG/MPE when they renew online at <http://my.siam.org>.

Stay tuned for the new Class of SIAM Fellows

SIAM would like to thank the community for sending in their nominations for the newest class of SIAM Fellows. SIAM Fellows, selected each year based on their distinguished research contributions and service to the community, help raise visibility of the mathematical sciences and honor outstanding individuals in the field. The 2015 Class of SIAM Fellows will be announced on March 31, and will be recognized at the [8th International Congress on Industrial and Applied Mathematics \(ICIAM 2015\)](#), to be held August 10-14 in Beijing, China.

Please go to the link below to learn more about the SIAM Fellows program:

<http://www.siam.org/prizes/fellows/index.php>

Are you making the most of your membership?

Stay in touch with all that SIAM has to offer: in addition to SIAM's peer-reviewed publications, books, and conferences on state-of-the-art topics in applied mathematics and computational science, there is much more that SIAM members can benefit from. Make the most of your membership by visiting the likewise named page:

<http://www.siam.org/membership/makethemost.php>

Welcoming new SIAG/GD officers

SIAM is pleased to announce newly-elected officers for the SIAM Activity Group on Geometric Design (SIAG/GD). The new officers, who will serve terms through December 31, 2016, are:

<i>Chair:</i>	Tom Peters
<i>Vice Chair:</i>	Stephen Mann
<i>Program Director:</i>	Daniel Gonsor
<i>Secretary:</i>	Gudrun Albrecht

::: CSE15 UPDATES :::

Mobile app for Conference on Computational Science and Engineering

A mobile app for the [SIAM Conference on Computational Science and Engineering \(CSE15\)](#) taking place March 14-18 in Salt Lake City, Utah is available for download.

Plug www.tripbuildermedia.com/apps/siam2015events into your mobile browser. The link will automatically detect the type of device and take you to the right place to download the app. Or, view the mobile site in HTML5 by connecting to www.tripbuilder.net/mw/apps/siam2015events. You will be requested to set up an account to use the mobile app. This will allow you to share your calendar of show events across iOS and Android devices, but not with the HTML5 version. You can then select CSE15 from the list of 2015 SIAM events on the app or mobile site to view the schedule, browse speakers, attendees, and exhibitors, take a look at maps and building layouts, sync events with your mobile calendar, create your own show by selecting specific sessions, and more!

Thinking of writing a book?

Ever thought about writing a book? Wondered just what that entails? A session at the [SIAM Conference on Computational Science and Engineering](#) this month will bring together successful authors and SIAM publishing staff to discuss concepts of book writing. Panelists will go over a step-by-step description of the process, from initial idea to published book, and also discuss other aspects to consider, such as when and why to write a book, the author/publisher relationship, and pitfalls to avoid. Even if you aren't currently thinking of becoming an author, this session promises to be lively and engaging! View full details here: http://meetings.siam.org/sess/dsp_programsess.cfm?SESSIONCODE=20850

And while you're at CSE15, don't forget to visit the SIAM books booth. Attendees who buy two books get a 40% discount.

Want to communicate your research to the public?

Are you working on an amazing application or research project that you'd like to tell the world about, but don't know how to get started? Visit the communication "doctors" at CSE15! Mathematicians, educators, science advocates and writers will help translate your research to a general-audience level, making it more accessible to the public. They'll also help delineate your work into key points and relevant narratives for the media. Animations or visuals are welcome as well: load them on a flash drive and bring along. Science writer Flora Lichtman, whose work has appeared in the *New York Times*, NPR's *Science Friday*, and *Popular Science*, will be among the doctors on staff.

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

::: PUBLISHING NEWS & NOTES :::

New SIAM Books

Unified Transform for Boundary Value Problems: Applications and Advances

A. S. Fokas and B. Pelloni

This book describes state-of-the-art advances and applications of the unified transform and its relation to the boundary element method. The authors present the solution of boundary value problems from several different perspectives, in particular the type of problems modeled by partial differential equations (PDEs). They discuss recent applications of the unified transform to the analysis and numerical modeling of boundary value problems for linear and integrable nonlinear PDEs and the closely related boundary element method, a well-established numerical approach for solving linear elliptic PDEs.

Additional information: <http://bookstore.siam.org/ot141>

2015 / viii + 310 pages / Softcover / ISBN 978-1-611973-81-5 / List Price \$94.00 / SIAM Member Price \$65.80 / **Order Code OT141**

Arc Routing: Problems, Methods, and Applications

Edited by Ángel Corberán and Gilbert Laporte

Arc Routing: Problems, Methods, and Applications opens with a historical perspective of the field and is followed by three sections that cover complexity and the Chinese Postman and the Rural Postman problems; the Capacitated Arc Routing Problem and routing problems with min-max and profit maximization objectives; and important applications, including meter reading, snow removal, and waste collection.

Additional information: <http://bookstore.siam.org/mo20>

2014 / xviii + 392 pages / Softcover / ISBN: 978-1-611973-66-2 / List Price \$104.00 / MOS/SIAM Member Price \$72.80 / **Order Code MO20**

::: UPDATES ON CONFERENCES & PRIZES :::

[Child care grants for Dynamical Systems meeting](#)

SIAM is offering up to \$250 per family for attendees to bring children to the [2015 SIAM Conference on Dynamical Systems \(DS15\)](#). A description of the kinds of expenses reimbursable can be found under [Guidelines for Reimbursable Child Care Expenses](#).

The deadline for applications for DS15 grants is March 23, 2015. View details here:

<http://www.siam.org/meetings/ds15/childcare.php>

[Student travel funds available for SIAM meetings](#)

SIAM will award several hundred travel awards for graduate students wishing to attend SIAM conferences in 2015. Those eligible are urged to apply! Do you qualify for travel funds? Check out the criteria on the student travel awards page:

<http://www.siam.org/prizes/sponsored/travel.php>

[SIAM conference registrations & submissions](#)

[SIAM International Conference on Data Mining \(SDM15\)](#), April 30-May 2, 2015, Vancouver, British Columbia, Canada

Pre-registration deadline: April 2, 2015

<https://www.siam.org/meetings/sdm15/regform.php>

[SIAM Workshop on Network Science \(NS15\)](#), May 16-17, 2015, Snowbird, Utah, USA

Pre-registration deadline: April 20, 2015

<https://www.siam.org/meetings/ns15/regform.php>

[SIAM Conference on Applications of Dynamical Systems \(DS15\)](#), May 17-21, 2015, Snowbird, Utah, USA

Pre-registration deadline: April 20, 2015

<https://www.siam.org/meetings/ds15/regform.php>

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

Hotel information is now posted at <http://www.siam.org/meetings/ct15/hotel.php>. 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

Deadline extended:

Submission of accepted minisymposia abstracts: March 31, 2015

Submission due for accepted embedded meeting abstracts: April 30, 2015

Closing date for poster submissions: April 30, 2015

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

Submissions site and information at <http://www.iciam2015.cn/Submissions.html>

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

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

Deadline for contributed talks: February 28, 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>

Student and Early Career Travel Support deadline: March 18, 2015

Student information: <http://www.siam.org/prizes/sponsored/travel.php>

Early Career information: <http://www.siam.org/prizes/sponsored/earlycareertravel.php>

[SIAM Conference on Geometric and Physical Modeling \(GDSPM15\)](#), October 12-14, 2015, Salt Lake City, Utah, USA

Abstract submissions for proceedings deadline: March 20, 2015

Full paper submissions for proceedings deadline: March 27, 2015

Minisymposium proposals deadline: May 11, 2015

Abstracts of all contributed and minisymposium presentations deadline: June 8, 2015

<http://www.siam.org/meetings/gdspm15/submissions.php>

Student and Early Career Travel Support deadline: May 22, 2015

Student information: <http://www.siam.org/prizes/sponsored/travel.php>

Early Career information: <http://www.siam.org/prizes/sponsored/earlycareertravel.php>

[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>

Student and Early Career Travel Support deadline: April 17, 2015

Student information: <http://www.siam.org/prizes/sponsored/travel.php>

Early Career information: <http://www.siam.org/prizes/sponsored/earlycareertravel.php>

[SIAM Conference on Analysis of Partial Differential Equations \(PD15\)](#), December 7-10, 2015, Scottsdale, Arizona, USA

Minisymposium proposals deadline: May 11, 2015

Abstracts for contributed and minisymposium speakers deadline: June 9, 2015

Student and Early Career Travel Support deadline: May 29, 2015

Student information: <http://www.siam.org/prizes/sponsored/travel.php>

Early Career information: <http://www.siam.org/prizes/sponsored/earlycareertravel.php>

AMCS conferences and events

[1st Annual Meeting of SIAM Central States Section](#)

April 11-12, 2015, Rolla, Missouri, USA

[39th SIAM Southeastern Atlantic Section Conference \(SIAM-SEAS 2015\)](#)

March 20-22, 2015, Birmingham, Alabama, USA

[2015 Annual Conference of the Great Lakes Section of the Society for Industrial and Applied Mathematics](#)

May 2, 2015, Grand Rapids, Michigan, USA

Society for Industrial and Applied Mathematics (SIAM)

3600 Market Street, 6th Floor, Philadelphia, PA, 19104-2688 USA

Phone: +1 215-382-9800 Fax: +1 215-386-7999 www.siam.org



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SIAM Unwrapped is a free electronic newsletter distributed monthly to SIAM members. It provides links to industry news, membership information, meetings, publications, and other items of interest.

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