

## SIAM Unwrapped – April 2015

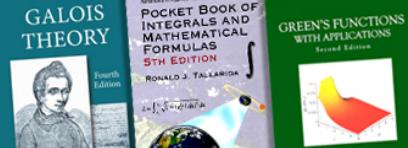
News & announcements for the SIAM membership community

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Dear SIAM members,

Did you know that SIAM offers discounted membership rates for members of other mathematical societies? SIAM has a reciprocity agreement with 13 societies: view the [entire list](#). If you would like to change your membership to a “reciprocal” category, contact SIAM Customer Service at [membership@siam.org](mailto:membership@siam.org).

Also, a reminder to all members (and especially students at this time of year): if you are moving or intend to move, please update your records at [my.siam.org](http://my.siam.org).

Regards,

Karthika Swamy Cohen

Editor

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#### **::: SIAM HQ UPDATE :::**

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#### **Congratulations to the 2015 Class of SIAM Fellows!**

Each year, SIAM names as Fellows of the Society members who have made outstanding contributions to fields served by SIAM. Fellows are nominated by peers for excellence in research and/or industrial work, educational and community activities, or other forms of achievements related to the goals of SIAM. This year, SIAM is pleased to recognize 31 distinguished members as Fellows. Please view the full list [here](#) and find details on all 2015 Fellows by viewing the press release:

<http://connect.siam.org/2015-class-of-siam-fellows-are-a-distinguished-group/>

[Read more](#) about the SIAM Fellows program. The 2015 Class will be recognized at the Prizes and Awards Luncheon to be held at the [International Congress on Industrial and Applied Mathematics](#) in Beijing in August.

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#### **::: PUBLIC AWARENESS :::**

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#### **M<sup>3</sup> Challenge celebrates a decade of success**

One of the ways SIAM fulfills its goals to increase the pipeline of scientists and engineers is via its high school mathematical modeling contest, [Moody's Mega Math \(M<sup>3</sup>\) Challenge](#). This year marks the contest's 10<sup>th</sup> anniversary. Over the past decade, high school students from across the United States have used their quantitative reasoning and critical thinking skills to weigh in on subjects as varied as social safety nets, alternative fuels, and school lunches. For their part, judges have attempted to pare down thousands of impressive submissions in this Internet-based contest to the very best. Top teams square off for the title of Champions at Moody's Corporation headquarters in Manhattan. Naturally, SIAM draws from its community of professional mathematicians for the judging phase of the contest. Starting with just 12 judges in 2006, when the contest was offered in the New York City metro area, the Challenge engaged 225 judges in 2015, having expanded to 45 U.S. states and Washington D.C. over ten

years. The contest goes nationwide in 2016 and is anticipated to expand internationally in 2018. Since its start, the Challenge has awarded \$955,000 in scholarships and seen almost 30,000 students submit solutions.

This year, more than 6,000 participants from across the U.S. used modeling to answer “is college worth it?”-Of 1,128 teams, the top six have now been chosen. Hailing from the states of Connecticut, Minnesota, North Carolina, and Virginia, these top teams will vie for the Champion prize by presenting their solutions to the final panel of judges on Monday, April 27. View more details:

<http://m3challenge.siam.org/newsroom/high-school-students-model-price-higher-education-determine-if-college-worth-it>

### **Happy Mathematics Awareness Month!**

There's plenty of reason to celebrate math. As the theme for this year's Mathematics Awareness Month indicates, math drives careers. While innovation is no doubt an increasingly important factor in the growth of world economies, especially in key areas such as like manufacturing, materials, energy, biotechnology, healthcare, networks, and professional and business services, many advances lie in applications of the mathematical sciences. The 17 people profiled in the [“Math Drives Careers” poster](#) represent diverse areas such as data analytics, risk assessment, natural language technologies, material sciences, and clinical pharmacology, but by no means depict all fields that have a foundation in math. Among them, is this [season's winner](#) of the American reality TV show “King of the Nerds”! Read more about Mathematics Awareness Month: <http://www.mathaware.org/mam/2015/>

Participate by submitting your “Math Awareness Month” outreach activity!

<http://www.mathaware.org/mamdynamic/activities/submit.jsp>

### **Recent reports highlight modeling, CS&E and advanced computing**

Several recent reports may be of interest to SIAM members:

1. [Future Directions in CSE Education and Research](#) is a draft report based on a workshop sponsored by SIAM and the European Exascale Software Initiative (EESI-2). Discussion and feedback on this report is welcome at [SIAM Blogs](#).
2. [Future Directions for NSF Advanced Computing Infrastructure to Support U.S. Science in 2017-2020](#) is an interim report of a study being conducted by the [Computer Science and Telecommunications Board](#) (CSTB) of the National Research Council (NRC). The report outlines the general scope of the study, and input is being solicited from the community. For more information, view the [“Dear Colleague” letter](#) from the Division Director of NSF's Advanced Computing Infrastructure Program.
3. [Modeling across the Curriculum II](#) is a report on the second SIAM-NSF Workshop on Modeling Across the Curriculum (Alexandria, VA January 12 – 14, 2014) sponsored by the SIAM Education Committee, with funding from the National Science Foundation.

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**::: PUBLISHING NEWS & NOTES :::**

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**Tutorials to manage and browse SIAM publications**

SIAM has prepared video tutorials to help familiarize library administrators and end-users with its epubs platform. The videos, which are available on [SIAM's YouTube channel](#), will aid direct subscribers as well as librarians and administrators in browsing and setting up SIAM journal subscriptions. The [tutorial for end users](#) gives tips on navigating SIAM's digital library for accessing journal articles, e-books, proceedings, and the like, as well as access to social media. The [library administrator tutorial](#) will help users to set up their institutional accounts, including viewing journal holdings and accessing usage and denial reports. Instructions also include preferences for setting up Table of Content alerts, viewing current IP ranges, and managing institutional branding.

View the full video tutorial here:

<http://www.siam.org/journals/>

**Have compelling undergraduate research?**

If you didn't already know, undergraduate research in applied and computational mathematics has a home in [SIAM Undergraduate Research Online](#) or *SIURO*, a web-based publication that accepts papers to which undergraduates have made significant contributions, as well as expository (survey) papers of high quality written by faculty members or researchers for an undergraduate audience. The publication represents a wide range of applied topics, including but not limited to, analysis, discrete mathematics, statistics, operations research, optimization, dynamical systems, modeling, and computation.

Do you have a manuscript of research conducted by an undergraduate in the abovementioned or related areas? Submit a paper!

<http://www.siam.org/students/siuro/submit/>

View the journal and sign up for e-alerts to be notified when new papers are posted:

<http://www.siam.org/students/siuro/alert.php>

**New SIAM Books**

***Mathematics of Planet Earth: Mathematicians reflect on how to discover, organize and protect our planet***

***Hans Kaper and Christiane Rousseau, editors***

Our planet faces many challenges. In 2013, an international partnership of more than 140 scientific societies, research institutes, and organizations focused its attention on these challenges. This project

was called Mathematics of Planet Earth and featured English- and French-language blogs, accessible to nonmathematicians, as part of its outreach activities. This book is based on more than 100 of the 270 English-language blog posts, and focuses on four major themes: A Planet to Discover; A Planet Supporting Life; A Planet Organized by Humans; and A Planet at Risk. Readers will learn about the challenges that confront the Earth today, and how mathematics and mathematicians contribute to a better understanding of some of these challenges.

Additional information: <http://bookstore.siam.org/ot140>

2015 / xii + 206 pages / Softcover / ISBN 978-1-611973-70-9 / List Price \$39.00 / Member Price \$27.30 / Order Code OT140

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

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#### **Wrapping up CS&E 2015**

The [2015 SIAM Conference on Computational Science and Engineering](#) held in Salt Lake City last month broke the record for highest attendance at a SIAM meeting, with nearly 1,700 attendees! While that was noteworthy in itself, the meeting excelled in many ways—from the exceptional invited lectures, minisymposia, and panels to lively discussion at the poster sessions and various orientation and reception events. Missed being there? Get a feel for the excitement at the meeting by viewing the [poster session sizzle video](#). View the [Twitter feed](#) from the meeting and add to the discussion by tweeting your thoughts with hashtag #SIAMCSE15.

[Selected presentations](#) from the conference were captured and are available as slides with synchronized audio. In addition, there are PDFs of the slides available for printing. The lectures include Linda Petzold's talk, [Celebrating 15 Years of SIAM CSE](#), invited speaker talks, minitutorials, as well as a selection of minisymposia. For a list of CS&E prize winners, view the [meeting homepage](#).

#### **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 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

Deadlines extended:

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

Pre-registration deadline: July 10, 2015

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

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

Utah, USA

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

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>

**Prize nomination deadlines**

**SIAG/APDE Prize**: June 15, 2015

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

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

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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.

Please note: If you would prefer not to receive this e-newsletter, reply to this email with the word "unsubscribe" in the subject line and you will be removed from the *SIAM Unwrapped* mailing list.