

## **SIAM Unwrapped - March 2013**

*News & announcements for the SIAM membership community*



Dear SIAM members,

If you haven't already, this is a reminder to renew your membership for 2013.

In this issue, we ask you for your ideas and thoughts on projects and initiatives you would like to see SIAM undertake.

Regards,

Karthika Muthukumaraswamy

Editor

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

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#### **What new initiatives should SIAM undertake?**

In considering ways to best allocate SIAM's resources, the SIAM Board has formed a New Initiatives Committee. The committee is seeking input from you, the SIAM membership, about things you would like to see SIAM do. Specifically, it welcomes ideas and suggestions for significant new initiatives that you would like SIAM to undertake and new products or services you would like it to offer. These could be, for instance, in the areas of membership support, education, publications, conferences, professional development, or outreach. Please send you ideas or suggestions to [NewInitiatives@siam.org](mailto:NewInitiatives@siam.org).

#### **SIAM response to call for information on StatSNSF**

At the [request](#) of the Mathematical & Physical Sciences Advisory Committee (MPSAC), SIAM put out a call to US-based SIAM members seeking feedback and recommendations for ways to better structure and support statistical sciences across the NSF—interpreting statistics broadly, and extending it to embrace data science, which is defined as the science of planning, acquisition, management, analysis of, and inference from data. The SIAM response, along with the complete responses to the MPSAC, will become part of the formal record of the committee. The summary, written by SIAM Past President Doug Arnold, emphasizes the highly interdisciplinary nature of data science, which was a persistent theme among responses. Offering grants that require collaboration among mathematicians, statisticians, computational scientists, biologists, and others, as well as better integration of computing and statistics were other common themes among the responses.

The cover letter and full report may be found at:

[http://www.siam.org/reports/statsnsf\\_13.pdf](http://www.siam.org/reports/statsnsf_13.pdf)

#### **Stay tuned for the 2013 Class of Fellows**

The new Class of SIAM Fellows will be announced on March 29. Each year, SIAM designates academics and professionals from the fields of applied mathematics and computational science as Fellows of the Society for their exemplary research in the field as well as outstanding service to the larger community. Fellows are nominated by the SIAM community. The 2013 class will be honored in July at the [SIAM Annual Meeting](#) to be held in San Diego, California.

#### **Call for applications for ICIAM Fellowships**

The International Council for Industrial and Applied Mathematics (ICIAM) has adopted a policy to extend its support to existing conferences (typically three per year) in non-Congress years. The decision on

which conferences to support, if any, will be made by ICIAM Officers within a month of each deadline, while the selection of the ICIAM Fellows and the determination of their level of support will be the responsibility of the conference organizers. The support will be directed toward funding a number of ICIAM Fellowships for participants from developing countries and regions. Applications may be submitted by email at any time to the ICIAM Secretary at [afitt@brookes.ac.uk](mailto:afitt@brookes.ac.uk). The next deadline for applications is March 31.

For full details, visit:

<http://www.iciam.org/DCS/>

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**::: STUDENT NEWS & NOTES :::**

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**M3 Challenge 2013 takes on recycling**

Consider it a 30-million-ton problem. Nearly 300 million tons of plastic is produced around the world each year, of which over 30 million winds up as plastic waste. Quantifying this waste, coming up with the best recycling methods for U.S. cities to implement, and recommending guidelines for nationwide recycling standards was the task for nearly 6,000 high school students in the Eastern U.S. who participated in [Moody's Mega Math Challenge](#) in early March. As is customary for the annual applied math contest organized by SIAM, it got high school students thinking about a very pertinent issue—and using math modeling to try to come up with solutions. Sponsored by The Moody's Foundation, which awards a total of \$115,000 to winning students, the contest inspires our future scientists and engineers to think about and solve real-world issues with the power of math.

Read the complete problem at:

[http://m3challenge.siam.org/pdf/m3challenge\\_problem\\_13.pdf](http://m3challenge.siam.org/pdf/m3challenge_problem_13.pdf)

**Student Chapter activities in 2012-2013**

The Heidelberg SIAM Chapter's public Halloween Lecture, Charles University in Prague chapter's biweekly student seminar on applied mathematics, George Mason University chapter's grading and proctoring of Northern Virginia's MATHCOUNTS competition, and Purdue University's *Computational Students Seminars Series* were just a few of the exciting events organized by SIAM student chapters all over the world in the 2012-2013 academic year. SIAM awarded a total of nearly \$40,000 to 83 chapters to help fund these activities.

Please read details on a sampling of the many chapter activities here:

<http://connect.siam.org/siam-student-chapter-update/>

Remember, student chapter representatives can directly post details about their events and activities on the [SIAM Student Blog](#). Please e-mail [pao@siam.org](mailto:pao@siam.org) with your submissions.

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**::: PUBLISHING NEWS AND NOTES :::**

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**JUQ begins publication**

Our newest journal, *SIAM/ASA Journal on Uncertainty Quantification*, begins publication later this month. The journal will launch with the publication of six papers to Volume 1 at [SIAM Journals Online](http://SIAM.Journals.Online), and will feature continuous electronic publication. Access is complimentary in 2013. Published jointly by SIAM and the American Statistical Association, the journal offers research articles presenting significant mathematical, statistical, algorithmic, and application advances in uncertainty quantification. It is dedicated to nurturing synergistic interactions between the mathematical, statistical, computational, and applications communities involved in uncertainty quantification and related areas. Authors are encouraged to submit their work at <http://juq.siam.org>. Information on the Editorial Policy, review procedures, and members of the board, is available at <http://www.siam.org/journals/juq.php>.

**New book series on financial mathematics**

SIAM is pleased to announce the launch of a new book series on financial mathematics, which will be led by Editor-in-Chief Jean-Pierre Fouque. The series will publish research monographs, advanced undergraduate- or graduate-level textbooks, and other volumes of interest to the broader mathematical finance community. We invite both introductory volumes aimed at a broad audience interested in understanding methods and applications within financial mathematics and engineering and monographs reporting on the most recent developments in the field. Books published in the series will also include volumes more specifically addressed to practitioners in the financial industry. Information for potential authors can be found at <http://www.siam.org/books/series/fm.php>.

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

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**Largest SIAM conference ever!**

The SIAM Conference on Computational Science and Engineering (CS&E) was the largest SIAM conference ever, drawing over 1,370 attendees to Boston, Massachusetts, during the week of February 25. The conference was 50% larger than anticipated based on the past two CS&E meetings sponsored by the SIAM Activity Group on CS&E. Thanks go to the [SIAG leadership](#) and especially to the co-chairs of the conference, Karen Willcox and Hans Petter Langtangen and their organizing committee, for putting together an outstanding meeting. SIAM would also like to extend thanks to the CSE13 sponsors: MathWorks, MIT Center for Computational Engineering, and IBM Research. Please view more details on the [sponsors](#) and a full list of [exhibitors](#) who helped make CSE13 such a success. If the [tweets](#) and [pictures](#) are any indication, the lectures and sessions were well received by attendees, and inspired a

great deal of discussion. Audio recordings of the invited lectures (with viewgraphs) will be posted on [SIAM Presents](#) at a later date.

### **Petzold Receives 2013 SIAM/ACM Prize in CS&E**

Linda Petzold was announced as the winner of the [SIAM/ACM Prize in Computational Science and Engineering](#) at the SIAM Conference on CS&E for her pioneering research in methods for the computational solution of differential-algebraic equations, their incorporation into widely distributed software and scientific applications, and her significant accomplishments in pioneering computational science and engineering education. Dr. Petzold is currently a professor in the departments of computer science and mechanical engineering at the University of California Santa Barbara. Her research interests are in modeling, simulation and analysis of multiscale systems in systems biology and engineering. The prize will be formally awarded at the [SIAM Annual Meeting](#) in San Diego in July.

### **Child Care Grants available for AN13 and CT13**

For the first time, SIAM is offering grants of \$250 per family for attendees who wish to bring children to the SIAM Annual Meeting and Conference on Control and its Applications being held jointly in San Diego, California, in July. For more information and a link to the application form, please visit:  
<http://www.siam.org/meetings/an13/childcare.php>

### **Conferences accepting registrations and submissions**

#### **[SIAM International Conference on Data Mining \(SDM13\)](#), May 2-4, 2013, Austin, Texas, USA**

Pre-registration deadline: April 4, 2013

<https://www.siam.org/meetings/sdm13/regform.php>

#### **[SIAM Conference on Mathematical and Computational Issues in the Geosciences \(GS13\)](#), June 17-20, 2013,**

University of Padova, Italy

Early pre-registration deadline: March 29, 2013

Late pre-registration deadline: May 31, 2013

<http://siamgs13.dmsa.unipd.it/registration.php>

#### **[SIAM Conference on Geometric and Physical Modeling \(GD/SPM13\)](#), November 11-14, Denver, Colorado,**

USA

Submission deadlines are as follows:

Abstracts for proceedings: April 8, 2013

Full papers for proceedings: April 15, 2013

Minisymposium proposals: June 3, 2013

Abstracts of all contributed and minisymposium presentations: July 1, 2013

#### **[SIAM Conference on Analysis of Partial Differential Equations \(PD13\)](#), December 7-10, 2013, Lake Buena Vista, Florida**

Submission deadlines:

Minisymposium proposals: May 7, 2013

Abstracts for contributed and minisymposium speakers: June 11, 2013

## **Open calls for prize nominations and submissions**

For the following prize, the nomination deadline is May 1, 2013:

SIAG/APDE Prize

Find the complete list of calls for nominations at:

<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 [karthika@siam.org](mailto:karthika@siam.org).

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