***SIAM Unwrapped* - April 2013**

News & announcements for the SIAM membership community

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Dear SIAM members,

If you have any changes to your membership information, including if you are moving or have changes to your position or affiliation, please update your records.

Are you earning your highest anticipated degree this year? Take advantage of SIAM's postgraduate membership next year.

Regards,

Karthika Muthukumaraswamy

Editor

April 2013 is designated Mathematics Awareness Month, with the theme, ' Mathematics of Sustainability.' SIAM supports Mathematics Awareness Month:

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::: SIAM HQ UPDATE :::

Announcing the 2013 Class of SIAM Fellows

Among the many ways in which SIAM honors exemplary researchers in the fields of applied mathematics and computational science, SIAM Fellowships are perhaps the most prestigious. The newest Class of SIAM Fellows was announced on March 29. This year's class includes 33 academics and professionals in the mathematical sciences and related fields, from universities, government labs and industry. Fellows are being recognized for their meritorious research as well as outstanding service to the community. Please read full details about the Fellows, their research interests and reason for recognition here:

http://connect.siam.org/announcing-the-2013-class-of-siam-fellows

The Class of 2013 Fellows will be honored at the SIAM Annual Meeting to be held in San Diego in July.

Free "Community of Science" services for members

SIAM now provides free access to Community of Science (COS) research services to members. Community of Science is a collection of online databases, providing research information and services for the research community. Products that SIAM members can access include:

1. **RefWorks-COS (research management software online)** that provides tools, data, and support to individual students and researchers at every level to easily gather, organize, and cite research information—from vetting the first hypothesis to obtaining funding, and getting published.
2. **Proquest COS Funding Opportunities**, a database of available opportunities for grants, fellowships, prizes, and other types of support in any discipline worldwide, designed to help researchers and faculty find monies to fund their work.
3. **Proquest COS Scholar Universe**, a resource for finding collaborators, peer-reviewers, and thought-leaders in nearly any discipline. Comprising international faculty at 4-year universities and their departments, the database includes more than one million scholars and organizations around the world.

To access COS, login to your SIAM account at *my.siam.org,* and click on the "Benefits" tab.

::: PUBLIC AWARENESS :::

INGenIOuS project to prepare future math and stat professionals

The increasingly complex scientific and social problems faced by the nation demand innovative solutions and require a workforce that is trained to meet these challenges. To best position mathematics and statistics departments and students to meet 21st century needs, the Mathematical Association of America (MAA) and the American Statistical Association (ASA), in partnership with the American Mathematical Society (AMS) and SIAM, are bringing together thought leaders to develop strategies for future investments in training at the graduate and undergraduate levels. The project plans to establish a community of stakeholders from academic institutions, professional societies, government agencies, and industry to think strategically about enhancing recruitment, retention, and job placement in the mathematics and statistics communities. Funded by the National Science Foundation, the INGenIOuS project, will be funded by a team from Knowinnovation. With a series of online activities, including live virtual panels and forum discussions, the project will culminate in the publication of six white papers and a 3-day workshop at the ASA headquarters in the Washington, D.C., area this July. For additional details, or to participate, please visit the project website: www.ingeniousmathstat.org.

Read the full press release here:

http://connect.siam.org/ingenious-project-to-think-strategically-about-future-mathematics-and-statistics-professionals

Latest nuggets of applied math research

What causes the precursor to delicious maple syrup to flow out of the barks of sugar maple trees every Spring? What causes a technological innovation, such as an energy-efficient product, to spread through a population? These seemingly divergent questions were topics for SIAM nuggets last month, based on research published in SIAM journals. Researchers at Canada's Simon Fraser University came up with a mathematical model to understand the little-understood physiology of sap exudation from maple trees. Read the complete nugget on sap flow. Researchers from the University of Bath and University of Leeds in the U.K. tackled the question of how a new innovation or technology might take hold in a physical community, based on social connections among individuals or households. Read the complete nugget on innovation diffusion. View all nuggets here. Have an idea for a SIAM nugget based on your research work? E-mail pao@siam.org.

Happy Mathematics Awareness Month!

The theme for Mathematics Awareness Month (MAM), held every April and sponsored by the Joint Policy Board for Mathematics, is "Mathematics of Sustainability." The aptly-chosen theme, which coordinates with the Mathematics of Planet Earth 2013 initiative, will spotlight the role that math can

play in helping us subsist under the limitations imposed by nature, balancing the needs of the world's population against Earth's limited resources. You can view the [MAM blog] and [theme essays] on the MAM website, where you can also download [the poster]. Educators can teach lessons that connect math with sustainability in their classes. View model lessons [here]. SIAM student chapters are encouraged to recognize Math Awareness Month on campus and in their communities. You can view of list of MAM activities organized by educational institutions (or add your own) here:

http://www.mathaware.org/mamdynamic/activities/index.jsp

::: STUDENT NEWS & NOTES :::

Top teams in Moody's Mega Math Challenge tilt towards being female

For the first time ever, the gender balance of finalists in [Moody's Mega Math Challenge] favors women. The top six teams, each of which has five students, are comprised of 17 young women and 13 young men. Organized by SIAM, the Challenge spotlights the role of mathematics as a powerful problem-solving tool and inspires young people to think about careers in applied mathematics and related STEM fields. One of the goals of the Challenge is to increase interest in computational science and applied mathematics among all students, and especially girls, who are often underrepresented in such endeavors. From this year's finalist numbers, it seems clear that the Challenge is one step closer to that goal. The total percentage of female participation was 33% in 2013, and has been relatively stable since the Challenge's inception, and improving this number remains another objective of the contest. This year, participants tackled America's [plastic pollution problem], quantifying the country's total plastic waste, and proposing the best recycling methods and guidelines. Of the 1,054 participating teams (almost 6,000 students), the top 55 will received a share of $115,000 in scholarship prizes awarded by The Moody's Foundation. The top six teams will square off for the ultimate prize at the contest finals to be held on April 29 in New York City (live stream can be viewed on the event day at http://m3challenge.siam.org/)

::: PUBLISHING NEWS AND NOTES :::

***SIAM News* syncs online and print delivery**

Featured articles from *SIAM News* are now available online immediately upon print publication. To view select articles from the April issue of the newsjournal of the applied mathematics community, please visit:

http://www.siam.org/news/news.php

You can view past issues on the *[SIAM News]* archive.

[SIAM/ASA Journal on Uncertainty Quantification launches]

SIAM/ASA Journal on Uncertainty Quantification (JUQ) launched on March 27 with its first seven papers publishing online to Volume 1. Offered jointly by SIAM and the American Statistical Association, the journal publishes research articles presenting significant mathematical, statistical, algorithmic, and application advances in uncertainty quantification. Under the leadership of Senior Editor Max Gunzburger, Editors-in-Chief James Berger and Donald Estep and more than 35 others comprising the editorial board, the journal will feature continuous electronic publication at SIAM Journals Online, with complimentary access in 2013. Covering the analysis and quantification of uncertainty in areas as divergent as finance, disaster preparedness, and porous media flows, the first few articles portend what's to come for JUQ: Great depth and breadth of coverage in uncertainty quantification research.

Access all articles at http://epubs.siam.org/journal/SJUQA3.

Authors are encouraged to submit their uncertainty quantification work for consideration for publication at http://juq.siam.org.

::: UPDATES ON CONFERENCES & PRIZES :::

Less than a month to nominate to the SIAG/APDE Prize!

The SIAM Activity Group on Analysis of Partial Differential Equations (SIAG/APDE) will present the SIAG/APDE Prize at the SIAM Conference on Analysis of PDEs (PD13) to be held December 7-10, 2013, in Lake Buena Vista, Florida. The prize is awarded to author(s) of the most outstanding paper on a topic in PDE published in English in a peer-reviewed journal within the four calendar years preceding the award year. The eligibility period for the 2013 award is January 1, 2009, through December 31, 2012. At least one of the awardees is expected to attend the award ceremony and present the paper as a plenary lecture at the meeting. Nominations should include a full bibliographic citation for the paper and a brief statement outlining the justification for nomination. The deadline for nominations is May 1. Please view full details at http://www.siam.org/prizes/nominations/nom_siagapde.php. For questions, e-mail littleton@siam.org.

Child Care Grants for AN13 and CT13

If you are bringing your children to the SIAM Annual Meeting this year, child care grants of $250 per family may be available! This is the first time that SIAM is offering this option for attendees who wish to bring their kids to the Annual Meeting and Conference on Control and its Applications. The meetings are being held jointly in San Diego in July. For more information and a link to the application form, please visit:

http://www.siam.org/meetings/an13/childcare.php

View invited lectures from CSE13

Invited lectures from the 2013 SIAM Conference on Computational Science and Engineering are now available on SIAM Presents. You may view the presentations by going to this direct link:

https://live.blueskybroadcast.com/bsb/client/CL_DEFAULT.asp?Client=975312&PCAT=5671&CAT=5674

Additional sessions including select minisymposia from CSE13 will be posted later this month.

Conferences accepting registrations and submissions

SIAM Conference on Applications of Dynamical Systems (DS13), May 19-23, 2013, Snowbird, Utah, USA
Pre-registration deadline: Monday, April 22, 2013
https://www.siam.org/meetings/ds13/regform.php

SIAM Conference on Mathematical Aspects of Materials Science (MS13), June 9-12, 2013, Philadelphia, Pennsylvania, USA
Pre-registration deadline: Monday, May 13, 2013
https://www.siam.org/meetings/ms13/regform.php

SIAM Conference on Mathematical and Computational Issues in the Geosciences (GS13), June 17-20, 2013, University of Padova, Italy
Pre-Registration Deadline has been extended to Tuesday, April 16!
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: Submissions closed
Full papers for proceedings: April 15, 2013
Minisymposium proposals: June 3, 2013
Abstracts of all contributed and minisymposium presentations: July 1, 2013
http://www.siam.org/meetings/gdspm13/submissions.php

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
http://www.siam.org/meetings/pd13/submissions.php

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.

SIAM Unwrapped is a free electronic newsletter distributed monthly to SIAM members.