

SIAM Unwrapped

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July 2011

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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.

Dear SIAM members,

Each year, SIAM awards a series of prizes in recognition of outstanding work by applied mathematicians and computational scientists, honoring individual papers, research contributions, and lifetime achievements by deserving individuals.

Open calls for nominations for 14 of SIAM's 2012 prizes, including six SIAM Activity Group prizes, are now posted. Please visit the link below for details on each individual prize and criteria for selecting prize recipients:

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

Regards,

Karthika Muthukumaraswamy

Editor

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::: ICIAM UPDATES :::

What to look for at ICIAM 2011

We are excited about welcoming you to [ICIAM 2011](#), the largest international event for applied mathematicians and computational scientists to be held next week in Vancouver, British Columbia. Registration will be open on-site at the Vancouver Convention Centre. In addition to over 25 invited speakers, the Congress will feature a series of [prize lectures](#) including the John von Neumann Lecture by Dr. Ingrid Daubechies (Duke University), the Olga Tauskey-Todd Lecture by Dr. Beatrice Pelloni (University of Reading) and the Peter Henrici Prize lecture by Dr. Bjorn Engquist (University of Texas at Austin). Dr. Susanne Brenner will deliver the AWM/SIAM Sonia Kovalevsky Lecture as part of the [40th Anniversary Meeting](#) of the Association for Women in Mathematics, an embedded meeting of the Congress. The abovementioned prize lecturers and the 2011 Class of SIAM Fellows will be honored at the CAIMS, Mitacs, Mprime, SIAM Awards Lunch to be held on Thursday, July 21. All members are welcome to attend the SIAM Annual Business Meeting, which will take place on Tuesday, July 19, at 7:30 a.m. in Room 109 of the Vancouver Convention Centre, chaired by SIAM President Nick Trefethen.

Please visit the ICIAM site for details on the scientific program and for information on other events and activities at the Congress:

<http://www.iciam2011.com/>

::: CYBER-SIAM UPDATES :::

New and improved online conference program

Users will now be able to view abstracts for all presentations at upcoming SIAM Conferences and the ICIAM 2011 Conference through the online program. The [MathJax](#)-enabled pages allow correct display of mathematical notation written in LaTeX on all browsers.

You can view the online program for ICIAM 2011 at
<http://meetings.siam.org/program.cfm?CONFCODE=IC11>

and SIAM's upcoming Conference on Control and Its Applications at
<http://meetings.siam.org/program.cfm?CONFCODE=CT11>

::: STUDENT NEWS & NOTES :::

Announcing our student winners in 2011

SIAM Award in the Mathematical Contest in Modeling

SIAM is pleased to announce the winners of the 2011 SIAM Award in the Mathematical Contest in Modeling (MCM). SIAM's award is given to two of the teams (one team per problem) judged "outstanding" in the contest, which is administered by the Consortium for Mathematics and Its Applications ([COMAP](#)). The student prize winners will receive their cash awards this summer and will be invited to present their winning papers at a special session of the 2012 SIAM Annual Meeting. Their faculty advisors will receive certificates of recognition.

Enhao Gong, Rongsha Li, and Xiaoyun Wang, from Tsinghua University, P.R.C., won the award for Problem A, the Continuous Problem, "Snowboard Course," with their solution, "A Half-Blood/Half-Pipe: A Perfect Performance." Their faculty advisor was Professor Jimin Zhang.

Daniel Furlong, Dylan Marriner, and Louis Ryan, from Harvey Mudd College, were the winners for Problem B, the Discrete Problem, "Repeater Coordination," with their solution, "Clustering on a Network." Their faculty advisor was Professor Susan Martonosi.

SIAM Student Paper Prizes

The purpose of the SIAM Student Paper Prize is to recognize outstanding scholarship by students in applied mathematics or computing. The awards are based solely on the merit and content of the students' contributions to the submitted papers, which must have been submitted for publication at the time of the contest.

We are pleased to announce the winners of the 2011 SIAM Student Paper Prizes:

Necdet Serhat Aybat (Columbia University), for his paper, "Unified Approach for Minimizing Composite Norms," co-authored with Garud N. Iyengar (Columbia University), and submitted for publication in Mathematical Programming Series A.

Sungwoo Park (University of Maryland), for his paper, "Portfolio Selection Using Tikhonov Filtering to Estimate the Covariance Matrix," co-authored with Dianne P. O'Leary (University of Maryland), and published in SIAM Journal on Financial Mathematics. Vol. 1 (2010), pp. 932-961.

Xiangxiong Zhang (Brown University), for his paper, "On Maximum-Principle-Satisfying High Order Schemes for Scalar Conservation Laws," co-authored with Chi-Wang Shu (Brown University), and published in Journal of Computational Physics Vol. 229 (2010) 3091-3120.

The student prize winners will receive their certificates and cash awards this summer, in addition to invitations to present their winning papers at a special session of the 2012 SIAM Annual Meeting.

China's first SIAM Student Chapter

We are pleased to announce that the Chinese Academy of Sciences has established a SIAM Student Chapter in Beijing, China - the first in the country. Professor Ya-Xiang Yuan of the Institute of Computational Mathematics & Scientific/Engineering Computing will be the faculty advisor for the new chapter. Following are the chapter's elected officers:

President: [Zaikun Zhang](#)

Vice President: [Bo Jiang](#)

Secretary: [Dongsheng Xu](#)

Treasurer: [Fusheng Luo](#)

Find more details on the chapter here:

<http://www.siam.org/students/chapters/current/cas.php>

SIAM Student Chapters aim to promote interest in applied mathematics and computational science by increasing avenues for students to share ideas, organize events, explore professional development opportunities and encourage interdisciplinary participation on campuses worldwide.

::: PUBLISHING NEWS AND NOTES :::

Get alerts about SIAM books and journals

Want to know as soon as a SIAM journal issue or e-book is published? Sign up for our journal and e-book table of content (TOC) alerts! You will receive alerts via e-mail about e-books and/or journals you specify in either plain-text (ASCII) or HTML format. HTML formatted e-mails are fully linked to abstracts and full texts of articles.

To sign up, simply enter your e-mail address and select your categories of interest on the link below:

http://epubs.siam.org/interactive_features/journal_toc_alerts

If you have questions or would like more details on how this service works, visit the FAQs page:

http://epubs.siam.org/interactive_features/journal_toc_alerts?faq=true

SIAM e-books are currently available for institutional access.

Half a year into SIAM's e-book program

SIAM's [e-book program](#) has been underway since late January and publisher David Marshall reports that halfway through its first year, the new undertaking has been very well received. "The number of participants grows daily and we currently have more than 35 institutions from around the world

accessing SIAM e-books. We expect that number to grow significantly through the rest of the year and into the future,” Marshall said.

Among the many notable institutions now offering SIAM’s collection of e-books are California Institute of Technology, Cornell University, Massachusetts Institute of Technology, Stanford University, École Polytechnique de Montréal, Yale, RPI and Saudi Arabia’s King Abdullah University of Science and Technology. A feature of SIAM’s e-book program that librarians appreciate is the availability of full MARC files, which are the e-book equivalent of hard-copy card catalogs. SIAM’s MARC files are available as a single file covering the entire collection, or as individual files for each book. Newly published SIAM books will be available as e-books immediately upon publication and the full collection features nearly 400 titles. At this time, we are only offering e-books as a collection for institutional access.

“We are pleased that so many institutions have signed on so quickly,” Marshall said. “And we’re confident that before long SIAM e-books will be as widely available in university libraries as SIAM journals and print books have always been.”

New SIAM Book

A First Course in Numerical Methods

Uri M. Ascher and Chen Greif – University of British Columbia

A First Course in Numerical Methods is designed for students and researchers who seek practical knowledge of modern techniques in scientific computing. Avoiding encyclopedic and heavily theoretical exposition, the book provides an in-depth treatment of fundamental issues and methods, the reasons behind the success and failure of numerical software, and fresh and easy-to-follow approaches and techniques. The authors focus on current methods, issues, and software while providing a comprehensive theoretical foundation, enabling those who need to apply the techniques to successfully design solutions to nonstandard problems. The book also illustrates algorithms using the programming environment of MATLAB®, with the expectation that the reader will gradually become proficient in it while learning the material covered in the book. A variety of exercises are provided within each chapter along with review questions aimed at self-testing.

Taking an algorithmic approach, the book focuses on techniques that have a high level of applicability to engineering, computer science, and industrial mathematics.

Additional information: <http://www.ec-securehost.com/SIAM/CS07.html>

2011 / xxii + 553 pages / Softcover / ISBN 978-0-898719-97-0

List Price \$95.00 / Member Price \$66.50 / **Order Code CS07**

::: **CONFERENCE UPDATES** :::

Apply for a SIAM Travel Award for PP12!

Just a reminder to students and postdoctoral applicants that applications are still being accepted for SIAM Travel Awards to the [SIAM Conference on Parallel Processing for Scientific Computing \(PP12\)](#). The conference will take place February 15-17, 2012 in Savannah, Georgia. The application deadline for travel awards is AUGUST 1, 2011, two weeks PRIOR to the deadline for submission of abstracts. If you are advising a student on a contributed presentation or minisymposium, please be sure to alert them to this deadline.

Go to the SIAM Travel Award site to apply:

<http://awards.siam.org>

Conferences accepting registrations and submissions

[SIAM Conference on Parallel Processing for Scientific Computing \(PP12\)](#), February 15-17, 2012, Savannah, Georgia USA

Submission for minisymposia and contributed papers and posters are being accepted for

Minisymposium proposals are due July 18, 2011.

The deadline for abstracts for contributed and minisymposium speakers is August 15, 2011.

Submission information can be found at:

<http://www.siam.org/meetings/pp12/submissions.php>

[SIAM Conference on Uncertainty Quantification \(UQ12\)](#), April 2-4, 2012, Raleigh, North Carolina, USA

SIAM's newest SIAG on Uncertainty Quantification will be holding its first meeting in 2012.

The submission deadline for minisymposium proposals and abstracts for contributed and minisymposium speakers is November 8, 2011.

Go to the submission page for details:

<http://www.siam.org/meetings/uq12/submissions.php>

The conference is being held in cooperation with the [American Statistical Association \(ASA\)](#), the [Statistical and Applied Mathematical Sciences Institute \(SAMSI\)](#) and the [United States Association for Computational Mechanics \(USACM\)](#).

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Addendum

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Math 2025 at ICIAM 2011

If you plan to attend [ICIAM 2011](#) in Vancouver, please note that there is a special panel session on Thursday, July 21, from 3:00-5:00 p.m. Math 2025 is a study by the National Academies Board on Mathematical Sciences & their Applications, funded by the [NSF](#), a forward-looking examination of our field. Find more information here:

<http://connect.siam.org/?p=209>

The panel is seeking input from the applied mathematics community. This will be an interactive session. Your inputs are encouraged. Please come prepared to provide commentary and examples to the panel.

SIAM Business Meeting

Reminder: the SIAM Business Meeting will take place from 7:30-8:30 a.m. on Tuesday, July 19 at Vancouver Convention Center, Room 109. Since SIAM is not holding a separate Annual Meeting this year, we are taking the opportunity to use the ICIAM venue to hold our annual business meeting, where we present a status report on the Society and seek inputs from the membership. We hope you can attend. SIAM President Nick Trefethen will lead the session.

Another unauthorized use of SIAM information

SIAM has received a second batch of complaints about WSEAS in regard to one of their conferences. Numerous members of the editorial board of the *SIAM Journal on Numerical Analysis* (SINUM) wrote to say that the WSEAS website listed the names of everyone on the SINUM editorial under the heading "committee," implying that they were the members of the conference organizing committee. None of the SINUM editors had agreed to serve on any WSEAS committee nor had they given permission to have names listed on the conference website. Each requested that their name be removed, and eventually the entire list of SINUM editors was removed from the website. This is yet another example of outrageous and unethical behavior by the WSEAS conference organizers and their collaborators, a previous case being the repeated use of the SIAM name to advertise conferences with which SIAM has no connection. SIAM suggests that its members avoid all activities connected with WSEAS. Please report any such incidents, such as that described above, to SIAM so that we might protect our good name and that of our members.

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.

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