



SIAM Unwrapped

News & announcements for the SIAM membership community

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February 2012

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Dear SIAM Members,

As we look forward to the [2012 SIAM Annual Meeting](#), we will provide important announcements in the AN12 section to keep you updated.

Students and first-time attendees can also get tips on “Navigating a SIAM Conference” from a brand new flyer developed by our Membership Committee to help you get the most out of SIAM meetings. Check it out!

<http://www.siam.org/membership/individual/pdf/navigating.pdf>

Regards,

Karthika Muthukumaraswamy
Editor

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::: SIAM HQ UPDATE :::

Nominate for a SIAM committee

The SIAM Committee on Committees and Appointments (CCA) will be filling vacated committee positions in the next several months. The committee tries to seek volunteers interested in serving, as well as suggestions for suitable candidates from the SIAM community. The committee may not be able to match each name submitted to a given vacancy, but all names received will be taken into consideration when filling vacancies.

For a list of committees, please visit:

<http://www.siam.org/about/committees.php>

To make a suggestion or to volunteer, go to:

http://www.surveymonkey.com/s.aspx?sm=7EtDH_2bRjSomVYcT4jopuTw_3d_3d

Suggestions sought for SIAM Board and Council

The SIAM Nominating Committee will be drawing up a slate of candidates for the Fall 2012 elections. The SIAM community has the opportunity to make suggestions or volunteer for the various elected offices. In 2012, the Nominating Committee will be seeking eight candidates to fill four seats on the Council and six candidates to fill three positions on the Board of Trustees. Some of the current officers will be seeking re-election.

Names of eligible persons suggested will be submitted to the Nominating Committee for their consideration.

Suggestions may be made at the link below:

<http://www.surveymonkey.com/s.asp?u=744182086492>.

MGAM program welcomes new members

Several of our members chose to introduce their colleagues and friends to a world of SIAM benefits through our [Member Get a Member](#) campaign last year. 61 nominators and their 61 newly-referred members were entered into a drawing, which was held January 30, 2012. We are pleased to welcome our new members, and announce our [prize recipients](#), who won one of three prizes: a free year of SIAM membership, a SIAM conference registration or a SIAM book of their choice. Nominators also received free SIAM t-shirts. You can find a list of winners [here](#). We would like to express our heartfelt thanks to our referring members for helping the SIAM community grow.

Please find more information on prize winners at the link below:

<http://connect.siam.org/?p=1669>

You can view the entire list of newly-referred members here:

http://www.siam.org/membership/mgam_winners.php

::: PUBLIC AWARENESS :::

Be part of *Math Midway 2 Go*!

We need your help in showing kids how much fun it is to be a mathematician! In addition to being an official partner in the [USA Science and Engineering Festival](#) to be held in April in Washington DC, SIAM is partnering with the [Museum of Mathematics](#) (MoMath) to bring more math and more mathematicians to science festivals in the US. MoMath is creating a lightweight traveling exhibition—aptly named [Math Midway 2 Go](#) (MM2GO)—based on six exhibits from the popular hands-on [Math Midway](#) exhibition, currently on tour at science museums across the US. One of the few interactive mathematics resources available for presentation at science festivals, MM2GO will also serve as a great opportunity for local mathematics professionals and students to demonstrate and communicate their excitement about math. Getting involved with MM2GO is a fun, easy way to present our field to lots of interested people. Want to be part of this exciting project? Based on your interest and availability, you can lead a hands-on math demo, explain the wonders of being a mathematician, develop interactive, educational apps, or volunteer at exhibits to be held in cities across the US.

Find more details here:

<http://connect.siam.org/?p=1655>

::: CYBER-SIAM UPDATES :::

SIAM Presents: our digital archive of conference presentations

As you may know, SIAM digitally captures and archives a lot of the exciting applied math and computational science research presented at SIAM conferences. What started with audio and slide captures from our 2008 Annual Meeting has now expanded to cover content from eight conferences, including selected minisymposia from three SIAG meetings. Presentations from the 2011 [Conference on Analysis of Partial Differential Equations](#) are the most recent addition:

https://live.blueskybroadcast.com/bsb/client/CL_DEFAULT.asp?Client=975312&PCAT=2976&CAT=3594

Comprising over 400 presentations and counting, the collection is organized into 28 categories, including algebraic geometry, atmospheric and oceanographic science, computational science, data mining, geophysical science, optimization, uncertainty quantification, and more. Also included are video clips of speaker interviews and topic overviews from sessions at the 2010 SIAM Annual Meeting and ICIAM 2011.

The audio-visual archive's rapid growth has warranted a new name, *SIAM Presents*, and a new page:

<http://www.siam.org/meetings/presents.php>

Check it out!

::: PUBLISHING NEWS AND NOTES :::

New SIAM Books

Computational Optimization of Systems Governed by Partial Differential Equations

Alfio Borzi – University of Würzburg

Volker Schulz – University of Trier

This book fills a gap between theory-oriented investigations in PDE-constrained optimization and the practical demands made by numerical solutions of PDE optimization problems. The authors discuss computational techniques representing recent developments that result from a combination of modern techniques for the numerical solution of PDEs and for sophisticated optimization schemes.

Additional information: <http://www.ec-securehost.com/SIAM/CS08.html>

2012 / xx + 286 pages / Softcover / ISBN 978-1-611972-04-7

List Price \$89.00 / SIAM Member Price \$62.30 / **Order Code CS08**

The Art of Differentiating Computer Programs

Uwe Naumann – RWTH Aachen University

This is the first entry-level book on algorithmic (also known as automatic) differentiation (AD), providing fundamental rules for the generation of first- and higher-order tangent-linear and adjoint code. The

author covers the mathematical underpinnings of real-world numerical simulation programs in addition to explaining their applications.

Additional information: <http://www.ec-securehost.com/SIAM/SE24.html>

2012 / xviii + 340 pages / Softcover / ISBN 978-1-611972-06-1

List Price \$93.00 / SIAM Member Price \$65.10 / **Order Code SE24**

Numerical Solution of Algebraic Riccati Equations

Dario A. Bini – University of Pisa

Bruno Iannazzo – University of Perugia

Beatrice Meini – University of Pisa

This concise and comprehensive treatment of the basic theory of algebraic Riccati equations describes the classical as well as the more advanced algorithms for their solution in a manner that is accessible to both practitioners and scholars. It is the first book to treat nonsymmetric algebraic Riccati equations in a clear and systematic way. Some proofs of theoretical results have been simplified and a unified notation has been adopted.

Additional information: <http://www.ec-securehost.com/SIAM/FA09.html>

2012 / xii + 256 pages / Softcover / ISBN 978-1-611972-08-5

List Price \$69.00 / SIAM Member Price \$48.30 / **Order Code FA09**

::: 2012 SIAM ANNUAL MEETING UPDATES:::

Professional development workshops for women at AN12

COACHing Strong Women in the Art of Strategic Persuasion, a professional development workshop for women, will be held Sunday, July 8, 2012, in Minneapolis, MN, a day prior to the SIAM Annual Meeting. The morning session will be targeted to senior faculty and the afternoon session to junior faculty in their early years of academia. Combining self-presentation, leadership training, and faculty development in an interactive format, the workshops are designed to help women be effective in leading or participating in discussions, meetings, and group negotiations. While priority registration is given to women, male participants are also invited.

For more information, please visit:

<http://www.siam.org/meetings/an12/workshops.php#coach>

Win a SIAM Student Paper Prize!

We are now accepting submissions for the [SIAM Student Paper Prize](#), which recognizes outstanding scholarship by students in the fields of applied mathematics or computing. The award is based solely on the merit and content of the student's contribution to the submitted paper; papers must have been

already submitted for publication, and may be co-authored. Prizes will be awarded at the SIAM Annual Meeting to be held July 2012 in Minneapolis, MN, where recipients will also have the opportunity to present their winning papers in a special session. If you have a student who has played a pivotal role in the findings of an outstanding paper submitted for publication, consider submitting it for our Student Paper Prize! Submissions are being accepted until March 15, 2012.

For further details and instructions on submissions, please visit:

http://www.siam.org/prizes/nominations/nom_student.php

The 2012 Lagrange Prize seeks nominations

Awarded every three years—jointly by the Mathematical Optimization Society (MOS) and SIAM—the [Lagrange Prize in Continuous Optimization](#) recognizes outstanding work in the area. Research to be considered should form the final publication of the main result(s) bearing a publication date within the six calendar years prior to the year of the award (2006—2011). Award recipient(s) will receive a certificate and a total cash prize of \$1,500 at the 2012 SIAM Annual Meeting (AN12). Nominations should be submitted by March 1, 2012.

Visit the nomination page for more about the prize and for instructions on how to make a nomination:

http://www.siam.org/prizes/nominations/nom_lagrange.php

::: UPDATES ON CONFERENCES & PRIZES :::

Conferences accepting registrations and submissions

[SIAM Conference on Uncertainty Quantification \(UQ12\)](#), April 2—5, 2012, Raleigh, North Carolina, USA

Pre-registration deadline is Monday, March 5, 2012

For more details, or to register, visit the registration page:

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

[2012 SIAM Annual Meeting \(AN12\)](#), July 9—13, Minneapolis, Minnesota, USA

The poster submission deadline has been extended to April 16, 2012.

Please visit the conference submission page for more information:

<http://www.siam.org/meetings/an12/submissions.php>

[SIAM Conference on Mathematics for Industry: Challenges and Frontiers \(MI12\)](#), October 2—4, 2012, Denver, Colorado, USA

Deadlines for submissions:

Minisymposium proposals: March 5, 2012

Abstracts for contributed and minisymposium speakers: April 2, 2012

Visit the submissions page for more information:

<http://www.siam.org/meetings/mi12/submissions.php>

Open calls for prize nominations

Lagrange Prize in Continuous Optimization Deadline for nominations is March 1, 2012.

Awarded jointly by SIAM and the Mathematical Optimization Society (MOS)

SIAM Student Paper Prize Deadline for nominations is March 15, 2012.

Find the complete list of calls for nominations at:

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

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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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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