



SIAM Unwrapped

News & announcements for the SIAM membership community

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June 2012

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Dear SIAM Members,

The latest SIAM Report on *Mathematics in Industry*, highlighting the essential role mathematics plays in various disciplines in the industrial sector, is now available. Find further details and a link to the full report below.

If you're moving or have any other changes to your profile information, please remember to update your record at my.siam.org.

Regards,
Karthika Muthukumaraswamy
Editor

Contents:

SIAM HQ UPDATE

- Nominate to the next Class of SIAM Fellows
- Annual business meeting for SIAM members

PUBLIC AWARENESS

- SIAM Report on *Mathematics in Industry* 2012

CYBER-SIAM UPDATES

- Photo galleries from SIAM Conferences
- Speakers from UQ12 on SIAM Presents

STUDENT NEWS & NOTES

- Students win prizes for research and modeling

PUBLISHING NEWS AND NOTES

- Individual e-book program to launch
- New and improved SIAM Books
 - *Solving PDEs in C++: Numerical Methods in a Unified Object-Oriented Approach*
 - *Finite Element Methods with B-Splines*

UPDATES ON CONFERENCES & PRIZES

- Conferences accepting registrations and submissions
- Open calls for prize nominations

::: SIAM HQ UPDATE :::

Nominate to the next Class of SIAM Fellows

The 2012 Class of SIAM Fellows will be honored at the SIAM Annual Meeting in July. SIAM is now getting ready to elect its next Class of Fellows. Members are invited to nominate distinguished mathematicians and computational scientists to be considered for the 2013 Class. Selections will be made in the fall. The SIAM Fellows Program was launched in 2008 to recognize members who have made outstanding contributions to fields served by SIAM. The Fellows Program encourages nominations from diverse backgrounds, including the industrial, private, and public sectors. Nominations from minority and underrepresented groups are encouraged as well. Please refer to the Fellows page for criteria and guidelines:

<http://www.siam.org/prizes/fellows/index.php>

Annual business meeting for SIAM members

The annual business meeting for members of SIAM will be held on Tuesday, July 10, 2012, at 6:15-7:15 PM in the Nicollet ABC room on Level 1 of the Hyatt Regency Minneapolis during the upcoming SIAM Annual Meeting. The meeting will be chaired by SIAM President Nick Trefethen and will include a review of SIAM activities, finances, and plans for the future. Refreshments will be served. Members are encouraged to attend the meeting, where they may participate in the discussion and raise questions or offer suggestions for future action. The presentation will subsequently be posted in the "[Reports section](#)" of the SIAM website.

::: PUBLIC AWARENESS :::

SIAM Report on *Mathematics in Industry* 2012

The mathematical sciences play an essential role in industrial research and innovation, with mathematicians and computational scientists occupying interdisciplinary team environments in various industrial disciplines. The goal of the latest SIAM Report on *Mathematics in Industry*, which was funded by the National Science Foundation, is to raise awareness about these varied uses of math in industry. The report includes insights from 145 mathematical and computational scientists from 14 major industrial sectors and details various applications. The report will be of interest to students, educators, and industry professionals alike. Read a more detailed summary [here](#). View a PDF version of the report here:

<http://www.siam.org/reports/mii/2012/index.php>

::: CYBER-SIAM UPDATES :::

Photo galleries from SIAM Conferences

Photos from PP12, IS12 and UQ12 are now posted on our [Flickr page](#). Feel free to download and post any picture from our gallery on your own website or university/organization page. Attendees are also encouraged to share their own photos and videos from all SIAM Conferences. Please share them on Twitter, Flickr, Facebook or YouTube and use the tag for the particular conference (tag is usually SIAM followed by 2-3 letter conference acronym and last two digits of the conference year). For photos and video from the SIAM Annual Meeting, please use hashtag #SIAMAN12 on Twitter and tag SIAMAN12 on Flickr and YouTube. You may also post pictures and video directly to the [SIAM Facebook page](#).

Speakers from UQ12 on SIAM Presents

Presentations of select sessions from the [SIAM Conference on Uncertainty Quantification](#), held in April, are now available on [SIAM Presents](#). Please go to the direct link below to view UQ12 slides and presentations:

https://live.blueskybroadcast.com/bsb/client/CL_DEFAULT.asp?Client=975312&PCAT=4072&CAT=4282

In addition to several lectures and minisymposia, presentations of five minitutorials are available, three of which have multiple parts. This was the first ever SIAM Conference on Uncertainty Quantification, sponsored by the SIAM Activity Group on Uncertainty Quantification, and 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).

::: STUDENT NEWS & NOTES :::

Students win prizes for research and modeling

The SIAM Award in the Mathematical Contest in Modeling (MCM) and the SIAM Student Paper Prizes for 2011 and 2012 will be awarded during the Prizes and Awards Luncheon at AN12. Presentations of winning papers will take place in two sessions on Wednesday, July 11. Vice President for Education Peter R. Turner will chair both sessions, which are part of “Student Days.”

The SIAM/MCM Award-winning university teams are: Tsinghua University, P.R. China (2011), and Harvey Mudd College (2011); Zhejiang University, P.R. China (2012), and University of Louisville (2012).

The SIAM Student Paper Prize winners are: for 2011 - Necdet Serhat Aybat, Columbia University; Sungwoo Park, Knight Capital Group; Xiangxiong Zhang, M.I.T.; and for 2012 - Brittany D. Froese, Simon Fraser University, Canada; Stefanie Hollborn, Johannes Gutenberg University Mainz, Germany; and Marina Moraiti, University of Pittsburgh.

More information will be posted at the following URLs:

http://meetings.siam.org/ess/dsp_programsess.cfm?SESSIONCODE=15146

http://meetings.siam.org/ess/dsp_programsess.cfm?SESSIONCODE=15147

::: PUBLISHING NEWS AND NOTES :::

Individual e-book program to launch

A little over a year after SIAM launched its [e-book program](#) for libraries and institutions, SIAM’s exceptional line-up of prize-winning authors and titles is getting ready to go electronic for individual buyers. Following a successful inaugural year with overwhelming acceptance by leading universities worldwide, SIAM is excited to launch its individual e-book program in the next several months. This will make SIAM’s large collection of books addressing both timely and fundamental topics—a leading resource to the applied math community—more easily available to researchers, faculty, and students around the world. Once launched, individuals will be able to purchase most of SIAM’s more than 400 books on a title-by-title basis through Google Play. Details will be available on the [e-books page](#) of the SIAM website as the launch date nears.

New and improved SIAM Books

Solving PDEs in C++: Numerical Methods in a Unified Object-Oriented Approach, Second Edition
Yair Shapira

In this much-expanded second edition, author Yair Shapira presents new applications and a substantial extension of the original object-oriented framework to make this popular and comprehensive book even easier to understand and use. It not only introduces the C and C++ programming languages, but also shows how to use them in the numerical solution of partial differential equations (PDEs). This edition includes several new sections, many including additional algorithms, as well as new content on 3-D nonlinear, image processing, and cryptography applications.

Additional information: <http://www.ec-securehost.com/SIAM/CS09.html>

2012 / xxxii + 774 pages / Softcover / ISBN 978-1-611972-16-0

List Price \$139.00 / SIAM Member Price \$97.30 / Order Code CS09

Finite Element Methods with B-Splines

Klaus Höllig — University of Stuttgart, Germany

Online materials for this self-contained and easily accessible text have been updated with the addition of a sample set of slides which provide new teaching material, a template for creating new slides, and a set of 75 problems with hints. Other supplementary materials include a collection of MATLAB[®] programs that illustrate the methods described in the book. These MATLAB routines for basic model problems are intended as examples that show how to exploit standard B-spline features.

Instructors may contact Hoellig@mathematik.uni-stuttgart.de for the full slideshow and solutions to problems.

Additional information: <http://www.ec-securehost.com/SIAM/FR26.html>

2003/ x + 145 pages / Softcover / ISBN 978-0-898716-99-3

List Price \$81.00 / SIAM Member Price \$56.70 / **Order Code FR26**

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

Conferences accepting registrations and submissions

[SIAM Conference on the Life Sciences \(LS12\)](#), August 7–10, 2012, San Diego, California, USA

The 2012 SIAM Conference on the Life Sciences is still open for registrations. Pre-registration deadline: Tuesday, July 10, 2012

<https://www.siam.org/meetings/ls12/regform.php>

[Analytic Algorithmics and Combinatorics \(ANALCO13\)](#), January 6, 2013, New Orleans, Louisiana, USA

Submissions are now being accepted for ANALCO13. The submissions deadline is August 1, 2012. Please visit the submissions page for details:

<http://www.siam.org/meetings/analco13/submissions.php>

[ACM-SIAM Symposium on Discrete Algorithms \(SODA13\)](#), January 6—8, 2013, New Orleans, Louisiana, USA.

Submissions deadlines:

June 26, 2012 4:59 PM EDT - Deadline - Short Abstract Submission and Paper Registration Deadline

July 3, 2012, 4:59 PM EDT - Deadline - Full Paper Submission

<http://www.siam.org/meetings/da13/submissions.php>

[SIAM Conference on Computational Science & Engineering \(CSE13\)](#), February 25—March 1, 2013, Boston, Massachusetts, USA

Submissions deadlines:

Minisymposium proposals: August 13, 2012

Abstracts for contributed and minisymposium speakers: September 10, 2012

<http://www.siam.org/meetings/cse13/submissions.php>

Open calls for prize nominations

Gabor Szego Prize - Deadline for nominations is September 15, 2012

This prize is awarded by the SIAG/Orthogonal Polynomials and Special Functions

For the following prizes, nominations are due October 15, 2012:

Germund Dahlquist Prize

The John von Neumann Lecture - suggestions welcome

Ralph E. Kleinman Prize

James H. Wilkinson Prize in Numerical Analysis and Scientific Computing

W. T. and Idalia Reid Prize

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. 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.