

## **SIAM Unwrapped – June 9, 2014**

*News & announcements for the SIAM membership community*

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Dear SIAM members,

Have you registered for the SIAM Annual Meeting yet? *Today* is the last day to pre-register! Do so now: <https://www.siam.org/meetings/an14/regform.php>

The hotel registration deadline is coming up as well. See more information at: <http://www.siam.org/meetings/an14/hotel.php>

Read about a new look for the SIAM online bookstore, SIAM's participation at the USA Science and Engineering Festival this spring, and more in this issue.

Regards,  
Karthika Muthukumaraswamy  
Editor

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## ::: SIAM HQ UPDATE :::

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### Nominate a SIAM Fellow

We invite members to nominate distinguished researchers to be considered for the 2015 Class of SIAM Fellows. Each year, SIAM designates as Fellows of the Society 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, as well as from minority and underrepresented groups. Selections will be made in the fall of 2014. Please refer to the Fellows page for criteria and guidelines:

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

Go to <http://nominatefellows.siam.org/> to make a nomination! The nomination site has recently been upgraded to be more user-friendly and integrate with our membership system.

The [2014 Class of Fellows](#) will be recognized at the SIAM Annual Meeting at the Prizes and Awards Luncheon to be held Tuesday, July 8, from 12:50-2:15 PM at the Chicago Hilton, a few blocks from the conference venue.

### Attend the SIAM annual business meeting

The annual business meeting of members of SIAM will be held on Tuesday, July 8, 2014, at 7:15-8:00 PM in the Grand Ballroom on the 4<sup>th</sup> Floor of The Palmer House, during the upcoming SIAM Annual Meeting. Participation is open to all SIAM members. The meeting will be chaired by SIAM President Irene Fonseca and will include a review of SIAM activities, finances, and plans for the future. Refreshments, including wine and beer, will be served. Be sure to attend!

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## ::: PUBLIC AWARENESS :::

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### SIAM at the USA Science & Engineering Festival

SIAM participated in the [USA Science & Engineering Festival](#), the nation's largest celebration of science and engineering, which took place April 26-27, 2014 in Washington, D.C. The event was hosted by Lockheed Martin. The SIAM booth invited visitors to experience living mathematics using simple every-

day materials and household items, and making connections between mathematical concepts and a variety of simple experiments. Students were also able to experience a collection of mechanical objects, which illustrated mathematical theorems in practical ways. See more details under the [Exhibits list](#) on the festival website. Volunteers from SIAM student chapters at George Mason University and Shippensburg University helped staff the SIAM booth. View all photos from the SIAM booth [here](#).

### **View videos from Gene Golub SIAM Summer School**

Most of the lectures from the 2014 Gene Golub SIAM Summer School held last summer in Fudan University, Shanghai, China are now available as videos. Lectures by Nick Higham, Peter Benner, Ren-Cang Li and Xiaoye (Sherry) Li can be found at the link below along with a description of the courses and course materials:

<http://www.siam.org/students/g2s3/2013/course.html>

You can also view the lecture videos on the SIAM YouTube channel [here](#).

### **Latest from SIAM Blogs**

Go to [blogs.siam.org](http://blogs.siam.org) for news from the greater mathematical community. This month, Peter Turner [previews Student Days](#) at the upcoming SIAM Annual Meeting, Jim Crowley discusses the importance of [exploring non-academic careers](#) in the mathematical sciences, and Richard O. Moore [offers a glimpse](#) of what to expect at the SIAM Conference on Nonlinear Waves and Coherent Structures.

If you want to contribute a post about any topic of relevance to the applied math and computational science world, send your questions or submissions to [blogs@siam.org](mailto:blogs@siam.org).

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#### **::: PUBLISHING NEWS & NOTES :::**

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### **Announcing the new SIAM bookstore!**

SIAM has launched a new and improved bookstore at <http://bookstore.siam.org>. Enhanced features allow you to create wish lists, browse sale items, view past and pending orders, and more! Members, be sure to use the coupon code "MEMBER" at checkout to get your 30% discount off the list price.

### **New SIAM Books**

#### ***Nonlinear Time Scale Systems in Standard and Nonstandard Forms: Analysis and Control***

*Anshu Narang-Siddarth and John Valasek*

This book introduces key concepts for systematically controlling engineering systems that possess interacting phenomena occurring at widely different speeds. The aim is to present the reader with control techniques that extend the benefits of model reduction of singular perturbation theory to a

larger class of nonlinear dynamical systems. New results and relevant background are presented through insightful examples that cover a wide range of applications from different branches of engineering.

Additional information: <https://bookstore.siam.org/dc26/>

2014 / xvi + 219 pages / Hardcover / ISBN 978-1-611973-33-4

List Price \$94.00 / SIAM Member Price \$65.80 / **Order Code DC26**

### ***Physics and Partial Differential Equations, Volume II***

*Tatsien Li and Tiehu Qin, Translated by Yachun Li*

This book proceeds directly from Volume I (SIAM, 2012) with five additional chapters that bridge physics and applied mathematics in a manner that is easily accessible to readers with an undergraduate-level background in these disciplines.

Additional information: <https://bookstore.siam.org/ot137/>

2014 / x + 271 pages / Softcover / 978-1-611973-31-0

List Price \$89.00 / SIAM Member Price \$62.30 / **Order Code: OT137**

### ***Practical Augmented Lagrangian Methods for Constrained Optimization***

*E. G. Birgin and J. M. Martínez*

This book focuses on Augmented Lagrangian techniques for solving practical constrained optimization problems. The authors rigorously delineate mathematical convergence theory based on sequential optimality conditions and novel constraint qualifications. They also orient the book to practitioners by giving priority to results that provide insight on the practical behavior of algorithms and by providing geometrical and algorithmic interpretations of every mathematical result. They fully describe a freely available computational package for constrained optimization and illustrate its usefulness with applications.

Additional information: <https://bookstore.siam.org/fa10/>

2014 / xiv + 220 pages / Softcover / ISBN 978-1-611973-35-8

List Price \$65.00 / SIAM Member Price \$45.50 / **Order Code FA10**

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

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### **Students win prizes at the Annual Meeting**

Student winners of major SIAM prizes will receive their awards at the Prizes and Awards Luncheon on Tuesday, July 8, from 12:45-2:30 PM at the Chicago Hilton, held as part of the SIAM Annual Meeting.

This year, the SIAM award for the Continuous Problem in the [Mathematical Contest in Modeling](#) goes to students Yuan Gong, Shu Liu, and Yandi Shen and their faculty advisor Jianxin Zhu from Zhejiang University, P. R. China. The award for the Discrete Problem goes to participants Yiping Liu, Yongyi Xie, and Yao Zhang and their faculty advisor Gaoping Li from Southwest University for Nationalities, also in P.R. China. The [SIAM Student Paper Prize](#) is awarded to Sean P. Cornelius of Northwestern University, USA, for the paper *Realistic Control of Network Dynamics*; Carlos Fernandez-Granda of Stanford University, USA, for the paper *Towards a Mathematical Theory of Super-Resolution*; Iain Smears of Oxford University, UK, for the paper *Discontinuous Galerkin Finite Element Approximation of Hamilton-Jacobi-Bellman Equations with Cordès Coefficients*.

## **CS&E Career Fair**

SIAM will organize a one day Career Fair focused on nonacademic employment of graduate students in the mathematical and computational sciences at the SIAM [Conference on Computational Science and Engineering](#). The career fair will be held on the first day of the conference: Saturday, March 14, 2015. Look for more details to be posted soon on the link below:

<http://www.siam.org/meetings/cse15/career.php>

## **Call for major 2015 SIAM prizes now posted**

Calls for nominations for major SIAM prizes in 2015 are posted on the prize nominations page:

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

Six of SIAM's major prizes will be awarded at SIAM's prize ceremony at ICIAM 2015. Recipients of The John von Neumann Lecture and the AWM-SIAM Sonia Kovalevsky Lecture will receive their prizes and deliver their lectures. The Peter Henrici Prize will be awarded jointly with ETH Zurich and will also feature a lecture. The George Pólya Prize for Mathematical Exposition, established just last year, will be awarded for the first time at ICIAM. The SIAM Prize for Distinguished Service to the Profession and the Ralph E. Kleinman Prize are other prizes that will be awarded at the Congress.

## **SIAM conference registrations & submissions**

**Registrations for the 2014 Annual Meeting and workshops co-located with the Annual Meeting:**

[SIAM Workshop on Exascale Applied Mathematics Challenges and Opportunities \(EX14\)](#), July 6, 2014, Chicago, Illinois, USA

[Pre-registration](#) deadline: June 9, 2014 **Today!**

[Hotel Reservation Deadline](#): June 16, 2014

[SIAM Workshop on Network Science \(NS14\)](#), July 6-7, 2014, Chicago, Illinois, USA

[Pre-registration](#) deadline: June 9, 2014 **Today!**

[Hotel Reservation Deadline](#): June 16, 2014

[2014 SIAM Annual Meeting \(AN14\)](#), July 7-11, 2014, The Palmer House, Chicago, Illinois, USA

[Pre-registration](#) deadline: June 9, 2014 **Today!**

[Hotel Reservation Deadline](#): June 16, 2014

[SIAM Conference on the Life Sciences \(LS14\)](#) , August 4-7, 2014, Charlotte, North Carolina, USA

[Pre-registration](#) deadline: July 7, 2014

[SIAM Conference on Nonlinear Waves and Coherent Structures \(NW14\)](#), August 11-14, 2014, Cambridge, United Kingdom

[Pre-registration](#) early-bird rate deadline: July 14, 2014

[ACM-SIAM Symposium on Discrete Algorithms \(SODA15\)](#), January 4-6, 2015, San Diego, California, USA

Short abstract [submission](#) and paper registration deadline: July 2, 2014

Full paper [submission deadline](#): July 7, 2014

[Algorithm Engineering and Experiments \(ALENEX15\)](#), January 5, 2015, San Diego, California, USA

Extended abstracts [deadline](#): September 22, 2014

[SIAM Conference on Computational Science and Engineering \(CSE15\)](#), March 14-18, 2015, Salt Lake City, Utah, USA

Minisymposium proposal [submission](#) deadline: July 31, 2014

Abstracts for contributed and minisymposium speakers [submission](#) deadline: August 21, 2014

Abstracts for contributed posters and minisymposium posters (thematic groups) [submission](#) deadline: August 21, 2014

## Prize nomination deadlines

[The John von Neumann Lecture](#): September 15, 2014

[Ralph E. Kleinman Prize](#): October 15, 2014

[George Pólya Prize for Mathematical Exposition](#): October 15, 2014

[W. T. and Idalia Reid Prize](#): October 15, 2014

[AWM-SIAM Sonia Kovalevsky Lecture](#): November 1, 2014

[Germund Dahlquist Prize](#): November 15, 2014

For the complete list of the call for nominations, please visit:

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

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