

Society for Industrial and Applied Mathematics

United Kingdom and Republic of Ireland Section (SIAM-UKIE)



SIAM-UKIE Newsletter

Number 4, October 2014

The 19th Annual Meeting of the UK and Republic of Ireland Section of SIAM

The [19th SIAM-UKIE Annual Meeting](#) will be held on January 8, 2015 at the University of Bath. The programme of the meeting will be based on six plenary talks on different topics of interest to a varied audience of established and young researchers in applied and industrial mathematics, and a poster session by graduate students. The plenary speakers are as follows: [Peter Benner](#) (Max Planck Institute for Dynamics of Complex Technical Systems, Germany), [S. Jon Chapman](#) (University of Oxford, England), [Michel Destrade](#) (National University of Ireland Galway, Ireland), [Marco Iglesias Hernandez](#) (University of Nottingham, England), [Vanessa Styles](#) (University of Sussex, England), and [Beth Wingate](#) (University of Exeter, England).

For the first time, this year, the Section invites every [SIAM Student Chapter in the UK and the Republic of Ireland](#) to delegate one student representative with a poster presentation to this meeting, and offers some financial support towards the travel expenses of these delegates. In addition, there is no participation fee for students, but all participants are required to register online. *The registration deadline is December 7, 2014.*

IMA Conference on Research in Mathematics and its Applications

A contiguous [IMA Conference on Research in Mathematics and its Applications](#) will be held at the University of Bath on January 9, 2015 to further strengthen the links between the two Societies, as in the preceding year. The confirmed speakers for this event are as follows: [Furong Li](#) (University of Bath), [Nathan Lepora](#) (University of Bristol), [Apala Majumdar](#) (University of Bath), [Richard Pinch](#) (Cheltenham), [Mark Roberts](#) (University of Surrey), and [Sarah Waters](#) (University of Oxford).

Arieh Iserles awarded SIAM Prize for Distinguished Service to the Profession

Arieh Iserles [pictured], Professor in Numerical Analysis of Differential Equations at Cambridge University, was awarded the SIAM Prize for Distinguished Service to the Profession at SIAM's Annual Meeting in Chicago earlier this year for his outstanding editorial contributions to applied mathematics. In 1992 he founded [Acta Numerica](#), an annual



volume that publishes seminal review articles in numerical analysis and scientific computing, and he has been Editor ever since. Under his guidance and leadership, Acta Numerica has published authoritative articles that are widely read and highly cited. He has also made major and long-standing editorial contributions to the [Journal of Foundations of Computational Mathematics](#) and the [IMA Journal of Numerical Analysis](#). — Endre Süli (President SIAM-UKIE)

In This Issue

- 19th SIAM-UKIE Annual Meeting , Bath, 2015
- IMA Conference, Bath, 2015
- SIAM Prize for Prof. Arieh Iserles
- 4th IMA Conference on Numerical Linear Algebra and Optimisation
- First Irish SIAM Student Chapter
- SIAM Student Chapter Conference at Reading
- SIAM Chapter Events Update

4th IMA Conference on Numerical Linear Algebra and Optimisation, Birmingham, September 2014

The [4th IMA Conference on Numerical Linear Algebra and Optimisation](#) took place last September at the University of Birmingham. Sponsored by [NAG](#) and [SIAM](#), the conference brought together over 90 researchers from both the numerical linear community and the optimization community, offering many opportunities to find and communicate points and topics of common interest. Several enthusiastic early career researchers did an excellent job at organizing enlightening minisymposia, which complemented the topics covered in the plenary talks [see [Sam Relton's blog](#)]. The conference closed with a scientifically interesting but also entertaining talk by [Iain Duff](#) of Rutherford Appleton Laboratory and CERFACS Toulouse (SIAM UKIE speaker) on “Hybrid methods for solving sparse linear systems”. — [Françoise Tisseur](#) (Vice-President SIAM-UKIE).



First Student Chapter of SIAM at National University of Ireland, Galway

On June 23-26, 2014, the newly formed [SIAM Student Chapter at NUI-Galway](#) organized a four-day [undergraduate modelling workshop](#), in conjunction with the Stokes Cluster of the School of Mathematics, Statistics and Applied Mathematics.



While the workshop followed a similar format to that of a European Study Group with Industry (ESGI), it was pitched at an undergraduate level, giving most of the students their first contact with the mathematical modelling of real-world problems. On the opening day, four problems were presented, two of which were adapted from previous ESGIs and two developed independently with the intention of ensuring a broad range of topics. The students then split into groups based on their preference for a particular problem. To aid the students in their efforts, each group was assigned a post-graduate mentor. At the end of the week, each group presented their findings to the other participants and researchers.

A total of 19 undergraduate students took part in the event, hailing from the University of Limerick, University College Dublin, University College Cork, Trinity College Dublin, NUI-Galway, Enseirb-Matmeca-Bordeaux and École Centrale de Marseilles. One student stated "It made a change from the general problems that have a definite answer. We got to think critically and discuss ideas." It is hoped that the workshop is just the first of many such productive collaborations between the SIAM Student Chapter and the Stokes Cluster at NUI-Galway. — *Shane Burns (SIAM Chapter Vice-President, NUI Galway)*

SIAM Student Chapter Conference at Reading

On September 5, 2014, the [SIAM Student Chapter, University of Reading](#) organized a [one day conference](#). The event took place in the historic Old Whiteknights House on the Whiteknights campus at Reading University, and was supported by SIAM and the Reading Graduate School. There were two plenary speakers: [Peter Grindrod](#) (Mathematical Institute, University of Oxford), who opened the conference with a talk on the human brain and phase locking on the n-torus, and [Hilary Weller](#) (NCAS Climate, Department of Meteorology, University of Reading), who talked about mathematical techniques for weather and climate prediction.



Between these talks, PhD students who came from various UK universities presented their work. Their talks covered a wide range of topics in applied mathematics, from insurance markets to mathematical biology to ocean modelling. For many of them, this event successfully provided a friendly environment to participate in a conference for the first time. — *Claudio Bierig (SIAM Chapter President, Reading)*

SIAM Student Chapter Events Update

[SIAM Chapter Talks, University of Warwick](#): Nigel Goodwin (Essence PS) - 5.XI.2014; Tim Palmer (University of Oxford) - 12.XI.2014; Richard Catton (Towers Watson) - 19.XI.2014; Mohammed Atari (Cyprotex) - 26.XI.2014; Heather Tewkesbury (Smith Institute) - 2.XII.2014.

[SIAM Chapter Career Fair, University of Warwick](#), co-organised with Warwick Careers - 7.XI.2014.

[Irish Applied Mathematics Research Students' Meeting](#), NUI Galway - 11.XII.2014.

[SIAM Chapter Day](#), Cardiff University - 15.I.2015.