

SIAM UK and Republic of Ireland section annual meeting 2012

University of Leicester
6th January 2012
(by Emmanuil Georgoulis)

On January 6, 2012, the SIAM UK & Republic of Ireland Section held its 16th annual meeting at the University of Leicester.

The aim of the annual meetings is to be a focal point for SIAM members in the UK and the Republic of Ireland and a showcase for the wide-ranging activities in applied and numerical mathematics across the UK and Ireland. The 2012 meeting drew the substantial number of 60 participants (for an one day meeting with general content), despite the early-January date.

This year we again had a diverse range of high-profile speakers. The day started with a talk by Charlie Elliott (University of Warwick) on "Computational Surface and Interface PDEs", an exciting topic both in terms of theory of numerical methods and in the wide range of applications from physics and biology modelled by PDEs on manifolds.

The day continued with fascinating talks by Bill Lionheart (University of Manchester) on "Some limited data problems in industrial tomography", where the state of the art in this important application area was presented and new promising methods have been proposed, and by Phillippe Toint (The University of Namur) on "The Cubic Regularization Algorithm and Recent Complexity Issues for Nonconvex Optimization", giving an exemplar delivery to a non-specialist audience of these important new developments in the far-reaching area of nonconvex optimization.

Continuing through the afternoon, Helen Byrne (University of Oxford) gave an impressive account on her research on "Multiphase and multiscale modelling of vascular tumour growth", detailing some of the modelling and computational challenges in the quest of better understanding this important mechanism. This was followed by Simon Chandler-Wilde (University of Reading) who delivered an excellent lecture on "Hybrid Numerical-Asymptotic Methods for High Frequency Scattering", highlighting his important contributions in the area, a result of successful combination of novel analytical and numerical techniques.

Concluding the day, Alex Lipton (Bank of America Merrill Lynch/Imperial College London) gave an exciting account on his research on "Implied Volatility and Its Calibration" using advanced PDE theory tools. The talk felt right at home with about 25 more Leicester students from the M.Sc. in Financial Mathematics and Computation attending it, creating a total audience of more than 80 people.

Rounding out the meeting, a poster session for PhD students ran throughout the day.

Information about the UKIE section can be accessed from links at

<http://www.siam.org/sections/siamukie/index.php>.

The next annual meeting will take place on January 8th 2013 at the University of Reading.