



Bath SIAM-IMA Student Conference
University of Bath
Wednesday 1st March 2017

Programme

All talks will be held in the Wolfson Lecture Theatre, 4 West 1.7.

Lunch, coffee breaks and posters will be in the atrium outside the lecture theatre.

09:30-10:00	Arrival and Coffee
10:00-10:10	Welcome
10:10-11:00	Plenary Talk - Philippe Blondel (Department of Physics, University of Bath) <i>Exploring the Oceans - Science for a Better World</i>
11:00-11:25	Philip Hamann (Department of Pharmacy & Pharmacology, University of Bath) <i>Using Real-World Data to Predict Response to High Cost Drugs in Rheumatology</i>
11:25-11:50	Owen Pembery (Department of Mathematical Sciences, University of Bath) <i>Bounds on the Helmholtz Equation with Nontrapping Wavespeed</i>
11:50-12:15	Emma Horton (Department of Mathematical Sciences, University of Bath) <i>An Introduction to the Neutron Transport Equation</i>
12:15-13:00	Lunch
13:00-13:25	Jehan Alswaihli (Department of Mathematics & Statistics, Reading) <i>Synergy of Data Assimilation and Inverse Problems Techniques</i>
13:25-13:50	James Fidal (Department of Architecture & Civil Engineering, University of Bath) <i>Applications of Mathematics in Urban Rainfall-Runoff Modelling</i>
13:50-14:15	James Jackamann (Department of Mathematics & Statistics, Reading) <i>Discontinuous Galerkin Methods for Nonlinear Wave Interactions</i>
14:15-15:00	Poster Session with Coffee <i>Posters are listed on the reverse of this programme.</i>
15:00-15:50	Plenary Talk - Jon Chapman (Mathematics Institute, University of Oxford) <i>Asymptotics Beyond All Orders: The Devil's Invention?</i>
15:50-16:00	Prize Announcements and Close
16:30	Drinks & Informal Dinner in Bath City Centre <i>Please let us know at lunchtime if you would like to join us for dinner. We will walk into town together at 16:30.</i>

Student Posters

All posters are displayed in the atrium outside the Wolfson Lecture Theatre
Numbers below correspond to poster board numbers.

1. **Qiang Chen** (Department of Architecture & Civil Engineering, University of Bath)
Developing an Efficient Numerical Method for Applications to Violent Fluid-Structure Interactions
2. **Enrico Gavagnin** (Department of Mathematical Sciences, University of Bath)
Modelling Persistence of Motion in Cell Migration at Multiple Scales
3. **Matthew Griffith** (Department of Mathematical Sciences, University of Bath)
Vertical Coupling in an Extended Unified Model for the Earth's Atmosphere
4. **David Kohan Marzagão** (Department of Informatics, King's College London)
Flag Coordination Games on Bipartite Graphs
5. **Stefano Simoncelli** (Department of Architecture & Civil Engineering, Bath)
Bioturbulence Caused by Vertical Migration of Zooplankton
6. **Francisco de Melo Viríssimo** (Department of Mathematics, University of Bath)
Dynamical System Methods for Waves in Fluids
7. **Alice Maciel Tabosa** (Department of Pharmacy & Pharmacology, Bath)
Development of a PBPK Model for Dermal Absorption
8. **Robbie Peck** (Department of Mathematical Sciences, University of Bath)
Strategies for a Phase II/III Clinical Trial Program
9. **Hayley Wragg** (Department of Mathematical Sciences, University of Bath)
Propagation of Signals from Indoor Small Cells and Optimisation of Cell Positions

Organisers

This conference is organised by the committee of the Bath SIAM-IMA Student Chapter:

Francisco de Melo Viríssimo, *President*

Adwaye Rambojun, *Vice-President*

Dan Green, *Secretary*

Ben Robinson, *Treasurer*

Amy Middleton, *Social Secretary*

Anna Senkevich, *Media and Promotion*

We hope you enjoy the first Bath SIAM-IMA Student Conference!

For feedback on the conference, or any future communication, you can contact us by email at siamsc@lists.bath.ac.uk.