

# SAMBa Newsletter

Issue 5, May 2016



## ITT3 develops projects in uncertainty and forecasting

More than 90 people converged in Bath in January for our 3rd Integrative Think Tank. Participants explored challenges presented by the Met Office, GKN, and Airbus, and formulated mathematical problems from them. There was a great atmosphere all week and our students' talent was showcased by their presentations. ITT3 has already delivered a consultancy project with Airbus for the Bath Institute for Mathematical Innovation. Some of the work on ice sheet modelling with the Met Office is being taken forward as a NERC DTP-funded project from October and more projects will follow. Fruitful discussions are continuing with GKN, alongside our collaborators from the department of Mechanical Engineering, and it is expected that a number of projects will result.



The SAMBa ITT concept has been featured in International Innovation magazine

## Where's the Maths?

In February we invited 19 academics from departments across campus to present their research challenges to our students and academics. The purpose was to highlight the mathematical expertise that researchers are currently missing and to encourage collaboration. Presenters only had 3 minutes to get their ideas across – strictly enforced by SAMBa students – but there was networking time after the event. Further discussions have since taken place and a number of joint research projects are already being planned.



### Coming up...

- 16th-20th May** BUC3: Trees and tree-like structures
- 27th May** New students welcome event
- 3rd-4th Jun** BUC4: New frontiers: advanced modelling in space and time
- 6th-10th Jun** ITT4
- 7th-12th Jun** Cheltenham Science festival
- 16th Jun** SAMBa Advisory and Monitoring Board meeting
- 22nd-24th Sep** BUC5: Uncertainty Quantification: When PDEs Meet Data Science



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## BUC series continues to grow

Following November's 1st event, a team of academics and PhD students from Bath returned to Mexico in February, this time to UNAM to deliver the second part of the BUC (Bath-UNAM-CIMAT) workshop series. The theme was "Thinking globally: The role of big data". Lectures were given by Gavin Shaddick, Dan Simpson and Karim Anaya-Izquierdo. SAMBa students Dorka Fekete and Matt Thomas together with Bath PhD student, Alice Davis, guided the lab sessions and gave talks on their research. The next statistical BUC event will take place in Bath in June and will give an insight into advanced modelling in space and time. The course will be led by Gavin Shaddick and Dan Simpson from Bath, and Jim Zidek from UBC, Vancouver. Prior to that, BUC3 will take place in CIMAT in May and will have a focus on probability theory.



Congratulations to our first year student Aoiheann Brady who



has been chosen as a **Royal Statistical Society Ambassador**. Through the Ambassador programme, the RSS aims to develop the public engagement skills of statisticians, creating a cohort of volunteers who help the media and the public understand statistical data and issues.

Congratulations to Professor Chris Budd and Dr Mike Fitch of BT, who have been awarded an EPSRC CASE studentship through the Smith Institute to continue a project that was developed at SAMBa's 1st ITT. The project will investigate the propagation of signals from indoor small cells and optimisation of cell positions.

Matt Thomas, a second year SAMBa student, attended the Bath Taps into Science Festival on 18th and 19th March. Matt is taking part in the Public Engagement Training module provided by our sister CDT in Sustainable Chemical Technologies (SCT) and has been working with chemistry and chemical engineering students to demonstrate how waste can be used more sustainably. To find out more about Matt's experience, check out the SAMBa blog: [blogs.bath.ac.uk/samba](https://blogs.bath.ac.uk/samba).



## 2016 SAMBa cohort recruited

We have 14 exceptional students due to start with us in September. They arrive from the UK, Spain, Hong Kong, Mexico, Germany, and Mongolia and bring skills in rowing, singing, squash, dancing, cricket, netball, playing guitar, and SCUBA diving. We are looking forward to welcoming them all to SAMBa to join our existing 22 students.



One of our new students, Tsogzolmaa Saizmaa has been awarded a prestigious Schlumberger Foundation *Faculty for the Future* scholarship. This funds women from developing countries to complete a PhD abroad and then return to their home country to lead their own research group. We are excited to be welcoming Tsoogii and her family to the UK and helping to promote Statistical Applied Mathematics in Mongolia.



We held our second inter-CDT pub quiz in March with 60 students from SAMBa, and the CDTs in Condensed Matter Physics, Photovoltaics, Sustainable Chemical Technologies, Decarbonisation of the Built Environment, and Digital Entertainment taking part. It was a great night, with the eventual winners being a SAMBa-SCT team, and a fun opportunity to build links between the CDTs.



We were sad to say goodbye to our wonderful administrator, Anna Fonge in March. Anna has moved back to Wales and we wish her the best of luck in her new role at University of Wales Trinity Saint David and in her bee keeping activities!



**We've been visiting:** Birmingham · EPFL Lausanne · IMPA (Rio de Janeiro) · Keele University · Koç University (Istanbul) · Leeds · London · L'Università di Torino · MIT · Paris · UNAM (Mexico City) · Universidade Federal do Paraná (Curtiba) · Universität Jena · University College Dublin · University of British Columbia · University of Glasgow · University of Kent · University of Nottingham · University of Oxford · University of Padua · University of Southampton · WHO Bonn



For more details on all these stories and to see how you can get involved, visit the SAMBa website: [bath.ac.uk/samba](https://bath.ac.uk/samba)