EPSRC Centre for Doctoral Training in Statistical Applied Mathematics at Bath

SAMBa Newsletter

Issue 15, December 2019







Recognition of Maths at Bath's track record in promoting gender equality

Advance HE's Athena SWAN Charter was established in 2005 to encourage and recognise commitment to advancing the careers of women in STEM academia and our home department of Mathematical Sciences has gained a Silver Award celebrating our good practice in gender equality.

Tim Rogers, who led the application, said: "I am thrilled that our hard work over many years has been recognised. We now have a fresh impetus to make Maths at Bath as inclusive and diverse as possible."

Achievements over the last five years include:

- Doubling the total number of female academic staff
- Increasing the proportion of female PhD students from 20% to 32%

Appointing the first two female professors

Coming up ...

27th - 31st Jan ITT11 (with BT and CPPM)

3rd - 5th Feb Beyond the car: Future mobility in Bath

19th Feb "Where's the Maths?"

March 2020 Data Science training work shop in Paraguay

8th - 12th Jun ITT12 (with NHS)

22nd - 27th Jun Global Challenges in Mongolia workshop

6th - 8th Jul 4th SAMBa conference



In August, we delivered our first international Integrative Think Tank in Guanajuato, Mexico. ITTs have been a SAMBa flagship activity since our inception. They bring together students, academics and external partners to reformulate broad challenges into a mathematical question that could form the foundation of a research project. The ITT built on the long-standing BUC initiative developed between Bath, UNAM and CIMAT. The partners were Samsung, CENAPRED (the Mexican national disasters agency) and CNB (the government agency seeking people who have been forcibly disappeared). 60 PhD students and academic researchers participated, including 8 of our students who led discussion groups and mentored those new to the ITT model.





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Congratulations to...

Jack Betteridge, Aoibheann Brady, Federico Cornalba, Emma Horton, Amy Middleton, Sam Moore, and Owen Pembery, who passed PhD vivas.

Euan Spence, awarded the John Todd prize by the Oberwolfach Foundation.

Chris Budd, who won the American Mathematical Society's Communications award.

Apala Majumdar who won an FDM Everywoman in Technology award.

Monica Musso on securing EPSRC funding to explore concentration phenomena in nonlinear PDEs.

Jonathan Bartlett for an MRC grant on clinical trial estimands: from definition to estimation.

Margaret Duff, Tom Finn, Kate Powers, Malena Sabate Landman, and Lizhi Zhang, each awarded funding from Bath Doctoral College for research trips.

All of cohort 5, who passed their MRes year.



Where are they now?

Matt Durey, cohort 1, finished SAMBa August 2018

What are you doing now?

I'm an Instructor of Applied Mathematics at MIT. What are you enjoying the most about it?

I'm enjoying working with people who have similar research interests to me and learning new skills!

What are you planning to do next?

If I feel ready, I will apply for faculty positions in the UK/US.

What do you miss most about SAMBa?

The cross-collaboration between mathematical disciplines.

What was the most fun thing you did whilst in Bath?

Punting on the Avon – which is even more fun when the co-pilot can't steer!



We've said goodbye to Jess Ohren, who joined the new AAPS CDT. Jess delivered a huge amount for SAMBa whilst she was with us, for which we are very grateful. Our new Coordinator is Helena Lake, who is already settling in to the controlled chaos of SAMBa!

A new University Centre for Mathematics and Algorithms for Data (MAD) has launched. It brings together researchers from Mathematical Sciences and Computer Science, working at the intersection of statistics, machine learning and numerical analysis.



Our collaboration with government agencies in Paraguay continues, thanks to funding from the World Bank. Training workshops on data science and statistics will take place in 2020, with the ministries of health and education. Essential to the collaboration is the Office for National Statistics Data Science Campus who have a long-standing collaboration with SAMBa. In September we visited the Instituto Desarrollo to scope the workshops, meet the ministries, and engage with local media!



Back in 2014, Sam Moore, one of our first cohort of SAMBa students was involved in a road accident in which he broke his neck. Less than a year later, Sam and his wheels re-joined SAMBa, and despite the hills, he can often be seen handcycling round the roads of Bath. Having handed in his thesis, Sam took off to Kenya in October to cycle 400km across the country, including climbing 2245 metre mountains. Sam was raising money for Regain who support tetraplegics into sport.



We've been visiting: Adastral Park · Alan Turing Institute · CIMAT · Central European University · Centre for Mathematical Modelling (Santiago) · Cummins Turbo Technologies · ETH (Zurich) · Emory University · HSBC · Hausdorff Institute · Imperial College London · Institute of Physics · Instituto Desarrollo · Isaac Newton Institute · Lunteren · Mango · Max-Planck-Institut für Mathematik in den Naturwissenschaften · National University of Mongolia · Playa del Carmen · Pontificia Universidad Católica de Chile · Pythéas Research Institute · Roma Tre University · UNAM · Unicef (Mongolia) · University College London · University of Bremen · University of Bristol · University of Cambridge · University of Plymouth · University of Warwick

For more details on these stories and to see how you can get involved, visit the SAMBa website: go.bath.ac.uk/samba



