School of Mathematics and Statistics Newsletter

August 2020

Welcome...

- to Isobel Webster who has joined us as an Associate Lecturer (Education Focused) in Mathematics for one year. Isobel got her PhD in Leeds and has been working at the University of Southampton for the past year.
- to new PhD student Savannah Rogers, who is joining the Statistics Division to work on 'Modelling population dynamics from photo-ID data using spatial capture recapture' supervised by Len Thomas and Richard Glennie. Savannah is starting remotely from Idaho and hopes to arrive in St Andrews in October.

Best Wishes...

- to Ian Goudie who retired at the end of July after more than 43 years with us. Ian has been a great colleague, always with the best interests of the students and his School and Division at heart. He has undertaken many roles over the years, for example as safety officer, library officer, staff/student council member, RSS liaison and most notably as exam scaling guru. We wish him the very best in retirement
- to Steve Buckland who has not completely retired but who dropped to a more part time post at the start of August. Steve came to St Andrews in 1993, was instrumental in building up the Statistics Division, which at one point was in a fairly precarious state, and was instrumental in creating CREEM and initiating the links between the partner Schools involved. He is very much personally responsible for CREEM's success and for fostering the working environment that CREEM has enjoyed since its creation. His many achievements culminated with the award of RSS Guy Medal in Gold in 2019. A nice tribute to Steve is a poster made for the International Conference on Statistical Ecology special session in honour of Steve in 2018, see http://tinyurl.com/SteveBucklandPoster
- to Herbert Fruchtl: his HPC (High Performance Computing) position will now be continued under the IT Services umbrella, rather than as part of our School. He does, however, intend to remain a member of the Coffee Club and partake in its activities, if and when they may resume.

Congratulations...

- to Stuart Burrell who has been awarded a highly competitive 6 month London Mathematical Society Early Career Fellowship, with a top up grant from the Heilbronn Institute. Stuart will hold the Fellowship in St Andrews following completion of his PhD.
- to Ashley Clayton who successfully defended his PhD Thesis entitled 'Subdirect products of free semigroups and monoids' on 22nd July.
- to Jack Reid who successfully defended his PhD thesis entitled 'A model for solar flares and coronal heating based on magnetohydrodynamic avalanches'.
- to our recent graduand Imogen Carruthers who received a prize from *Statisticians in the Pharmaceutical Industry* (PSI yes, that's right!). Imogen was nominated because of her results in relevant modules, but her success is also a recognition of the work that the School has done in medical areas, including teaching, research and promotion of the sector as a career destination.

Virtual Activities

- Duncan Mackay should have presented an invited talk at a *Lorentz Center Workshop on Magnetohydrodynamics for the 21st Century* in Leiden from 3rd-7th August. Unfortunately the meeting was cancelled due to the current pandemic.
- Peter Cameron took his first trip away from St Andrews since mid-March, to Prague for the *Midsummer Combinatorics Workshop*, a small invitation-only meeting. He spoke on 'The lockdown theorem', and began a couple of new research collaborations. Instead of conference T-shirts, the



Midsummer Combinatorics Workshop praticipants

- organisers had provided suitably ominous face masks.
- Saul Freedman gave a talk on 'The non-commuting, non-generating graph of a group' on 31st July, as part of the *Groups and Combinatorics Zoom Seminar* series hosted by the Centre for the Mathematics of Symmetry and Computation at the University of Western Australia, Perth.
- Andy Wright was to be leading a workshop at the *International Space Science Institute* in Bern, Switzerland for the week 10-14th August. Obviously this did not go ahead as planned. However, the international team members managed to meet virtually for a couple of hours a day to accommodate different time zones and to keep research momentum going. The workshop has been rescheduled for 2021.

Grants

• David Borchers has been awarded a grant of £75,000 by the Arcus Foundation https://www.arcusfoundation.org/our-support/ to develop and field test acoustic survey hardware and software for surveying gibbons. This follows on from work done on a National Geographic Society grant that had David and PhD student Filippo Franchini testing a drone-borne acoustic survey platform in Lao People's Democratic Republic last year. Mark Johnson from the School of Biology is a co-investigator and will be developing the hardware.

Public Engagement

• Throughout July members of CREEM have taken part in a number of virtual public engagement events. Valentin Popov gave a talk to the Sutton Trust summer school entitled 'Can we lie with Statistics?', Charles Paxton gave a talk for the HMS Unicorn on 'Mermaids: a (biased) scientific history', attended by at least 30 people, and Dave Miller engaged with pupils on a Harvard summer school about being an applied statistician and applying statistics to ecological problems.

Next Issue

• The next edition of the School Newsletter will be circulated in September. Items for inclusion may be sent to schoolnews@mcs.st-andrews.ac.uk at any time but a reminder will be sent out a week before the deadline.