

School of Mathematics and Statistics Newsletter

October 2023

Farewell to ...

- Valentin Popov (rather belatedly) who has moved to Germany. Valentin joined the School in September 2013 as a Lecturer in Statistics (Education Focussed). He has served the School and CREEM in numerous ways, teaching a very wide range of courses but also finding time to keep his research going
- István Kolossváry who is moving back to Budapest. István has been a member of the Analysis research group as a Leverhulme Trust Research Fellow since September 2019.
- Jenny, our level 2 cleaner, who is leaving us after 15 years in the Mathematical Institute. We are very grateful for all her hard work and wish her the best for the future.

Visitors

- Giusi Capobianco, a PhD student from Roma Tor Vergata, is visiting Yoav Len this semester to work on a project about the Brill-Noether theory of metric graphs.
- In the middle of September, Masayuki Henmi (Institute of Statistical Mathematics, Tokyo) and Hiroshi Matzuo (Nagoya Institute of Technology) visited Peter Jupp for a few days. They continued work on a long-running project about the connection between symplectic geometry and statistical asymptotics.
- E A Hunter (University of Chicago) visited the History of Maths group for a week, 25-29th September, while researching the reception of Archimedes' work in Early Modern Europe. Whilst in St Andrews she gave a seminar on 'Understanding nature through hymns and math: Proclus' De Sacrificio and his Commentary on Euclid'

Conferences, Talks and Visits

- On 27-28th September, Len Thomas participated in an in-person planning meeting in Boston for large-scale passive acoustic monitoring (PAM) of whales that is likely to be rolled out in coastal waters off the east coast of the USA. He spent the next week on a research visit to Syracuse University in upstate New York, collaborating with Susan Parks on a PAM study from Southern Brazil.
- Ian Durbach and Theoni Photopoulou visited the *African Institute of Mathematical Sciences (AIMS)* in Cape Town, South Africa in September 2023. Ian gave a talk at AIMS entitled 'Statistical methods for estimating animal abundance'. Theoni gave an in-person joint seminar between the Faculties of Biological Sciences and Statistical Sciences at the *University of Cape Town* entitled 'Estimating the population consequences of multiple stressors on marine mammals'.
- Russell Campbell and David Rees Jones presented research at the *UK Sea Ice Group Meeting* held on 18-19th September at UCL – University College London.
- Kenneth Falconer visited the University of Bristol on 18th September where he gave a colloquium 'Fractals and intermediate dimensions'. The visit also incorporated a meeting of the Heilbronn Institute Advisory Group, including meeting over lunch the Heilbronn postdocs and research students there, some of whom have St Andrews connections.

- Colva Roney-Dougal gave an *Algebra Seminar* at the University of York on 5th October, and then a PIMS (Pacific Institute for the Mathematical Sciences) *Distinguished Lecture* online on 6th October. Sadly there was no Pimms provided!
- Alex Rutar visited the University of Edinburgh on 9th October, where he gave a seminar titled ‘Assouad dimension and tangents of dynamically invariant sets’.
- On 25-26th September, Ben Swallow attended a Royal Society event in Newcastle *Time to start taking time seriously: circadian rhythms in infection and immunity*, presenting a poster on ‘Fast Bayesian inference for stochastic oscillatory systems using the phase-corrected linear noise approximation’, with Giorgos Minas a co-author. Then on 3rd October he attended a Royal Statistical Society Discussion meeting on *Parameterizing and Simulating from Causal Models*, and was also a member of the Discussions Meeting Committee.
- In September, Ben Swallow recorded a joint podcast with Quentin Cooper as part of the *European Crucible Network*, where they discussed their work on ‘AutoDOSE: AUTOpagy Dynamic Optimisation, Statistical learning and Experimental design’.
- On 5th October Isobel Falconer and Laura Johnson ran a focus group in Edinburgh for the *History for Diversity in Mathematics Network* funded by the Isaac Newton Institute. Stefania Lisai also took part.

Outreach



- On Saturday 30th September CREEM took part in the final event of *Explorathon2023*: a whole day at Dundee Science Centre! The rubber ducks were again the star attraction teamed up with our photo ID pairs game. Many thanks to Ali Johnston, Catriona Harris, Cornelia Oedekoven, Hannah Worthington, Chris (and Poppy) Sutherland, new PhD student Grace Edmondson and undergraduates Ellie Dossantos and Sophie Gibson.

Future Events

- Professor Colin Torney (University of Glasgow) will deliver the 2nd annual *JJ Valletta Memorial Lecture*, ‘From machine learning to migration: Quantitative approaches for understanding animal groups on the move’, at 2:00pm on Wednesday 25th October in the Mathematical Institute Lecture Theatre D. The lecture will be followed by a reception. For further details see <https://events.st-andrews.ac.uk/events/jj-valletta-memorial-lecture-2023>

Next Issue

- The next edition of the School Newsletter will be circulated in November. Items may be sent to maths-news@st-andrews.ac.uk at any time but a reminder will be sent out a week before the deadline.