School of Mathematics and Statistics Newsletter

October 2021

Congratulations ...

- to Fiona Macfarlane on the award of a prestigious Royal Society of Edinburgh Saltire Early Career Fellowship for the project 'Multiscale mathematical modelling of spatial eco-evolutionary cancer dynamics' joint between St Andrews and the Politecnico di Torino, Turin, Italy.
- to Helen Burgess who married Stephen Murray on 14th September in Falkirk.
- to Adán Mordcovich for successfully defending his thesis 'Probabilistic generation of almost simple groups and their maximal subgroups'.

Condolences

• The School extends its deepest sympathy and condolences to Hannah Worthington whose husband Adam passed away recently.

Farewell ...

• to Veronica Kelsey, who is taking up a Heilbronn Fellowship at the University of Manchester.

Activities - Virtual or Otherwise

- On 29th September Fiona Macfarlane gave a talk at the University of Sheffield on 'A framework to model cell populations responding to Turing patterns' at an event celebrating Alan Turing's work in Mathematical Biology. The day involved accessible research talks, historical talks and an interview with Sir Dermot Turing on the life and work of Alan Turing.
- Andy Lynch spent four days in September attending the *PanProstate Cancer Group* meeting, but he has forgotten which part of Italy the meeting did not take place in.
- Duncan Mackay attended (online) the *Lorentz Center Workshop on Magnetohydrodynamics:* Classical Physics for the 21st Century from 11-15th October. He also attended (online) the Solar Orbiter/PHI science preparation meeting from 28-30th September. The Solar Orbiter satellite mission will approach the Sun as close as 0.28AU (1AU = average distance from the Earth to the Sun) and is now entering its nominal science planning and operational phase.
- Alex Stewart gave an online seminar at the Massachusetts Institute of Technology (MIT) on 'Modelling the role of attention and social learning in the production of misinformation'.
- On 4th October, Peter Cameron spoke to the *Johannesburg Graph Theory School* in South Africa. He gave a talk entitled 'A quick tour of algebraic graph theory', and a tutorial session on 'Triangle-free strongly regular graphs'. He also attended the *International Conference on Discrete Mathematics* in Tirunelveli, India (the 'Oxford of South India'), where he spoke on 11th October on 'The geometry of diagonal groups' and gave a talk on 7th October in the *Workshop on Graphs from Algebraic Structures*, titled 'A hierarchy of graphs defined on groups'.

- Colva Roney Dougal is giving a public lecture entitled 'Party hard! The mathematics of connections' to the *Liverpool Mathematical Society* on Zoom on 13th October.
- Tiago Marques and Ben Swallow (Glasgow University) organized a session on Statistical Ecology on 8th October at the *International Conference on Advances in Interdisciplinary Statistics and Combinatorics*, AISC 2021, virtually at the University of North Carolina at Greensboro. The session included talks from a number of familiar names, including our own Steve Buckland as well as Olivier Gimenez, Janine Illian, Charlotte Jones-Todd, Beth Gardner.
- David Borchers gave a plenary talk a the *Student Conference on Conservation Science* in Bengalaru, India, on 28th September. At the time of writing the talk was still available on YouTube.
- On 6th October Isobel Falconer gave an in-person seminar to the *Cross-Cultural Circa-19th Century Research Centre*, based in the School of Modern Languages at St Andrews. Her title was 'Doing electrical science: Maxwell, Kelvin, the inverse square law and epistemic injustice'.

Other News

- Charles Paxton published an article in the Autumn 2021 CHAP magazine on George Drevar, a 19th century eccentric dubbed the 'Sea Serpent Monomaniac'. Thus Charles can now say he is a contributor to a men's fashion and lifestyle magazine, making him sound way cooler and stylish than he actually is!
- A project funded by the NGO the Arcus Foundation, to develop and test a new way of acoustically surveying gibbons and other species, has suffered its second 6-month delay because of Covid-19. David Borchers and Cornelia Oedekoven are working on the project with Aarhus University, Association Anoulak, a conservation organisation in Laos, and Rainforest Connection, a conservation NGO that develops AI methods for acoustic signal detection.

Next Issue

• The next edition of the School Newsletter will be circulated in November. Items for inclusion 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.