

# School of Mathematics and Statistics

## Newsletter

November 2021

### *Congratulations ...*

- to Finn Smith on successfully defending his PhD thesis entitled ‘Combinatorial algorithms in semigroups’ on 4th November.
- to Adán Mordcovich for successfully defending his PhD thesis ‘Probabilistic generation of almost simple groups and their maximal subgroups’.

### *Welcome ...*

- to Ashley Clayton, who has returned to our School as an Associate Lecturer (Education Focussed), after a brief sojourn in Lisbon following the completion of his PhD on ‘Subdirect products of free semigroups and monoids’ in St Andrews in 2020.

### *Farewell ...*

- to Murray Bennett, who is leaving us on 19th November to take up a position with a local company. Murray has been an Undergraduate Administrator in the School since January this year. We wish him the very best in his new post.

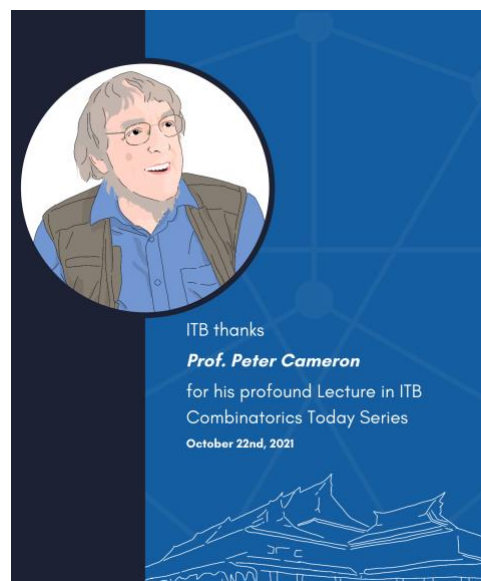
### *Former Staff*

- Dr Allan Gordon, a Reader in Statistics in the School from 1972 until his retirement in 2000, died on 7th October. Alan had an international reputation in his area of work in Classification, a methodology concerning the analysis of large data sets, and he wrote the definitive book on the subject. Alan was a keen rambler and a fine bridge player attaining the rank of grandmaster of the Scottish Bridge Union. After retiring he was a voluntary helper in the Oxfam bookshop in South Street.
- David Borwein, who was a mathematics lecturer in St Andrews from 1950 until 1963, died on 3rd September, aged 97. He was elected a Fellow of the Royal Society of Edinburgh in 1959, and on leaving St Andrews he became a professor at the University of Western Ontario where he was Head of Department for 22 years. He retired in 1989 but continued with his research in analysis as an emeritus professor until not long before his death, writing many joint papers with his son Jonathan. He maintained his connections with St Andrews, and regularly returned for the St Andrews Colloquium, the four yearly meeting held under the auspices of the Edinburgh Mathematical Society; indeed he attended every Colloquium from 1951 to 1996, some 12 in all.

### *Activities - Virtual or Otherwise*

- The Conference of the *Portuguese Statistical Society (Sociedade Portuguesa de Estatística)* took place online from 13-16th October. Andy Lynch and Victor Velasco-Pardo gave talks in the session ‘Statistical challenges in mutational signature analyses’. Andy Lynch and Tiago Marques chaired the two sessions on ‘Statistical analysis of animal density and abundance’, with Tiago speaking in the session chaired by Andy. It was a very enjoyable conference, but virtual, so sadly no Pastéis de Nata.

- Peter Cameron spoke (online) on 22nd October in the *Combinatorics Today* seminar series at the Institut Teknologi Bandung in Indonesia, on ‘A hierarchy of graphs defined on groups’, for which he received an elegant certificate which included his portrait. He also spoke on 29th October at a conference on *Progress in Mathematics towards Industrial Applications* at SRM University in Chennai, India, on ‘Synchronizing automata, de Bruijn graphs, and applications’.
- Nik Ruskuc made a research visit to Robert Brignall at the Open University where they continued their joint work on grid classes of pattern classes of permutations.
- Mark Holland from the University of Exeter visited Mike Todd for ten days in November to discuss projects on extreme value theory and records. Mark recommends the walking paths from Markinch into the Lomond Hills!
- On 2nd November, Isobel Falconer gave an invited talk on ‘Maxwell, Kelvin, the inverse square law and epistemic injustice’ in the *Mathematical Collaborations 4* online seminar series <https://mathscollaboration.wordpress.com/mathematical-collaboration-4-autumn-2021-online-seminar/> The aim of the Mathematical Collaboration series is to bring together researchers on the social aspects of mathematics, from across disciplines.



### ***Other News***

- Phil Bouchet, Catriona Harris, Enrico Pirotta, and Len Thomas (in collaboration with Peter Tyack from Biology) were successful in securing \$500k funding from the *U.S. Bureau of Ocean Energy Management* to develop a bioenergetic model for the Critically Endangered population of North Atlantic Right Whales. The model will be used to predict the consequences of disturbance from offshore wind developments on right whale abundance. This is a two-year project, with many overseas partners, mostly based in the U.S.
- Eiren Jacobson, Len Thomas, and Debbie Russell (School of Biology) were awarded funding for their joint application to the St Leonards World-Leading Doctoral Scholarship. The interdisciplinary project, titled ‘Developing Novel Methods for Estimating the Abundance of Grey Seals’, will provide full tuition, fees, and stipend for a PhD student. A student will be recruited to start in either Biology or Statistics in the 2022-23 academic year.

### ***Next Issue***

- The next edition of the School Newsletter will be circulated in December. Items for inclusion may be sent to [maths-news@st-andrews.ac.uk](mailto:maths-news@st-andrews.ac.uk) at any time but a reminder will be sent out a week before the deadline.