School of Mathematics and Statistics Newsletter

March 2018

Congratulations…

• to Peter Cameron on his election as a Fellow of the Royal Society of Edinburgh.

• to Patrick Antolin who has been awarded a prestigious STFC Ernest Rutherford Fellowship which he will take up in June 2018 for five years. Patrick thanks the Solar Theory Group, particularly Ineke De Moortel and Eric Priest, for their help and support throughout the years that led to this Fellowship.

• to Mike Todd who was selected as *Reviewer of the Year 2017* for the journal *Nonlinearity*. This was in recognition of the high quality and timeliness of his reviews during the year.

• to Kamilla Rekvenyi who has been elected School President for the academic year 2018-19.
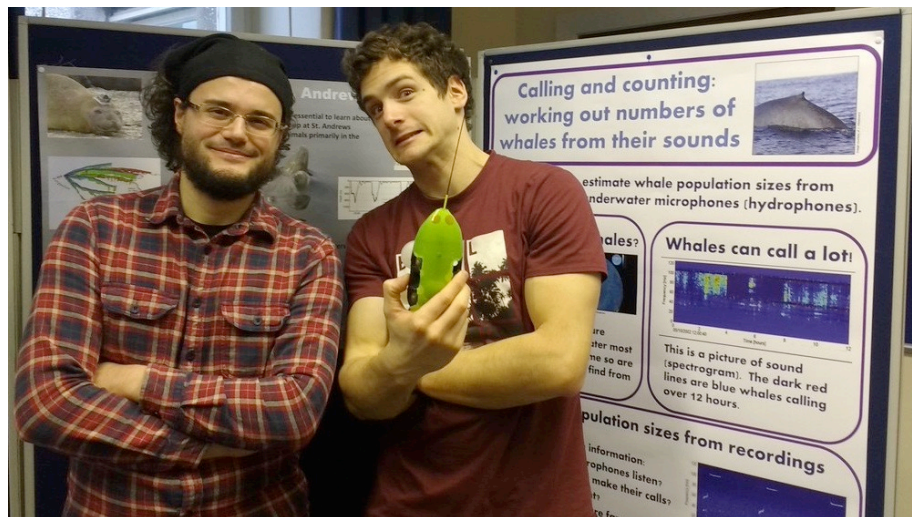
Visits and conferences

• Louis Theran attended a meeting of the *NSF Focused Research Group Stability of Structures* at the University of Florida.

• Nik Ruskuc is continuing his visit to Peter Mayr at the University of Colorado at Boulder. He gave an invited lecture at the *Kempner Colloquium*, and at the local *Algebra and Logic Seminar*. Nik also visited Alexander Hulpke at the Colorado State University at Fort Collins where he spoke at the CSU *Algebraic Combinatorics Seminar*.

• On 7th March, Martyn Quick visited the University of York to speak at the *York Semigroup Seminar* where he gave a talk titled 'Endomorphisms of the random graph'.

• On 20th February, Jon Fraser spoke on 'Dimension and measure for limit sets of Kleinian groups' at the *Ergodic Theory and Dynamical Systems Seminar* at the University of Warwick.

• At the beginning of March, Rosemary Bailey was external examiner for the viva of PhD candidate Bairu Zhang at Queen Mary University of London for a thesis entitled 'Functional data analysis in orthogonal designs with applications to gait patterns'.

• On 12th March, Tom Elsden gave a seminar on '3D Alfven Resonances' at the Mathematics Department of the University of Dundee.

• In February, two of our final year MMath students, Heather Dickinson and Barbora Cernokova, gave a very well received talk at the Strathmartine Centre in St Andrews, about their work on the archives of D'Arcy Thompson.

• Peter Cameron gave the 2018 *John Venn Lecture* at the University of Hull on 8th March, on 'The commutative law'. Venn, best known for the eponymous diagrams, was born in Hull in 1834.

The John Venn memorial window in the hall of Gonville and Caius College, Cambridge, where Venn was President from 1903-23.

Public Engagement

• On 10th March, members of CREEM and the Sea Mammal Research Unit (SMRU) joined forces to represent both groups at the *Science Discovery Day* in St Andrews and at the Dundee Science Centre as part of their *Meet the Expert* programme to coincide with the start of British Science week. Marco Casoli, Filippo Franchini, Popi Gkikopoulou and Danielle Harris were based in St Andrews with activities relating to marine mammal acoustics and density estimation from acoustics.

Gui Bortolotto, Rick Camp, Claudia Faustino, Catriona Harris, Janine Illian, Charles Paxton and Katherine Whyte were based in Dundee and ran activities showcasing a number of different methods for estimating abundance and used the SMRU photo-identification game to demonstrate mark-recapture methods. In addition Charles gave a talk on the 'Science of sea monsters'.

At Science Discovery Day in St Andrews

• Linnéa Franßen has been appointed the 2018 St Leonards School Associate Researcher by St Leonard's Doctoral and Postdoctoral College after an interview process in November. She is currently delivering a series of eight lectures and tutorials to the final year students at St Leonards secondary school as part of their *Theory of Knowledge* course. Accordingly, the topics covered – such as Mathematics in Nature or The History of Mathematics – all centre around the question 'How do we know what we know is true?'.

• Tom Elsden and Jon Fraser put on a workshop at a STEM Fair at St Ninian's High School in Glasgow on 13th March.

Other News

• Having had many requests for such over the years, Tom Blyth has prepared an electronic version of the out-of-print 1990 second edition of his OUP book *Module Theory: An Approach to Linear Algebra*. It is now publicly available on the University's open access repository and can be downloaded for free at http://hdl.handle.net/10023/12643

Forthcoming Events

• Mark Chaplain will give his Inaugural Lecture on Wednesday 11th April 2018 in School III on St Salvator's Quad.

• Our next History of Maths Talk will be Thursday 26th April at 4pm. Fenny Smith will be talking on 'So where did our numbers come from anyway?'. Fenny is an independent scholar, Secretary of the British Society for the History of Mathematics, and an expert on Pacioli and medieval mathematics.

• The British Applied Mathematics Colloquium BAMC2018 takes place in St Andrews from 26-29th March, see http://www.mcs.st-and.ac.uk/~bamc2018/

Caption Competition

• Captions are invited for this photo of the Principal with the Newsletter Editor, taken by Mark Chaplain. Caption suggestions may be sent to schoolnews@mcs.st-andrews.ac.uk and some may be included in the next Newsletter.

Next Issue

• The next edition of the School Newsletter will be circulated in April. 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.