School of Mathematics and Statistics Newsletter

November 2019

Congratulations ...

- to Cicely Macnamara and James Threlfall who recently welcomed Naomi Lorna who was born at home at 00.38am on 7th October weighing 7lb14oz. The whole family are doing well and Isaac is enjoying being a big brother.
- to Helen Burgess and partner Stephen Murray who are delighted to welcome their daughter, Cassandra Murray-Burgess, who was born at 11:32am on 29th October at Victoria Hospital, Kirkcaldy weighing 8lb 5½oz with APGAR ('Appearance, Pulse, Grimace, Activity, and Respirations') scores of 9 and 9. Mum is recovering slowly but surely and all are happy to be home getting to know their new little charge.



Cassie

Naomi

Welcome ...

• Welcome to Meredith Houlton, from San Diego who is starting a PhD in the History of Mathematics. Meredith reads Latin and will be studying the early modern mathematics books circulating in Scotland, starting with William Sanders' *Elementa Geometriae* (1686). (Sanders succeeded James Gregory as Regius Professor of Mathematics in 1674.)

Visitors

• Murray Elder visited the Algebra and Combinatorics Research Group from 11-14th November as part of a lecture tour supported by the London Mathematical Society. He gave a Pure Mathematics Colloquium talk entitled 'A new kind of automatic group'. Murray was a postdoc in St Andrews in 2004-05 and is currently at the University of Technology in Sydney.

Grants

• David Dritschel has been awarded £12,000 under the *Royal Society International Exchanges 2019 Cost Share* scheme, to collaborate with colleagues in Moscow and Vladivostok from November 2019 for two years.

Visits and Conferences

• Fiona Macfarlane gave an invited seminar at the University of Warwick on 25th October entitled 'A stochastic individual-based model to explore the immune response against solid tumours'. She also gave an invited talk 'Bridging the gap between individual-based and continuum models of growing cell populations' at the *Particles 2019* conference held from the 28-30th October at the Universitat Politècnica de Catalunya in Barcelona.

- Giorgos Minas gave a talk on 11th October at the University of Glasgow statistics seminar series with title 'Stochastic modelling, simulation and analysis of dynamic biological systems: the NF-κB case study'.
- On 11th October, David Dritschel gave a seminar on 'Shallow water models in fluid dynamics' at the Department of Applied Mathematics and Theoretical Physics, Cambridge.
- On 19th October, Rosemary Bailey and Rick Thomas attended the half-day meeting at the London Mathematical Society held to celebrate 21 years since the society moved into De Morgan House. When Rosemary was first a member of LMS Council, the Society had a single paid employee, Susan Oakes, who was based in half an office rented from the Royal Astronomical Society. In those days, a lot of LMS work was done (unpaid) by Council members, and rooms had to be rented for meetings of Council or other committees, as well as for LMS ordinary meetings. Rick did not become a member of Council until after the move. Things had changed dramatically by then, with many more paid employees, and with sufficient space for all except the largest meetings to be held in De Morgan House.
- Mike Todd has been traveling widely. He gave an invited talk on 'Hitting, escaping and mixing' at the workshop *Response Theory and its Applications in Geophysical Fluid Dynamics* from 14-16th October at the Institut Henri Poincaré in Paris. He also gave an invited lecture 'Escape of entropy' at the conference *Topological and Probabilistic Methods in Low-dimensional Dynamics*, 21st-25th October at the Shanghai Center for Mathematical Sciences at Fudan University, Shanghai. Then on 11th November he gave a seminar at ISEG (Lisbon School of Economics and Management), Universidade de Lisboa, Portugal, also on 'Escape of entropy'.
- Jon Fraser gave a talk at the University of Bristol on 24th October entitled 'Kleinian groups, parabolic points, and dimension' where the mathematics department has very recently moved into an impressive new building. Jon also attended a meeting of the *EPSRC Early Career Forum* in Birmingham on 11th November, and whilst down that way gave a seminar at the University of Birmingham entitled 'Dimensions of exceptional self-affine sets in **R**³'

Public Engagement

• On 25th October, Catriona Harris and Théo Michelot from CREEM took part in a First Chances event run by Biology. The theme of the session was identifying individual marine mammals using photo-ID and estimating abundance using mark-recapture methods.

Future Events

• This semester's History of Mathematics lecture 'From Neptune to St Andrews: John Couch Adams at 200' will be given by Kenneth Falconer at 4pm on Wednesday 27th November in Lecture Theatre C of the Maths Institute. This talk celebrates the bi-centenary of the birth John Couch Adams, arguably St Andrews' most famous Regius Professor of Mathematics, best known for 'discovering' the planet Neptune. The talk will discuss aspects of Adams' life and work.

Next Issue

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