

School of Mathematics and Statistics Newsletter

November 2017

Congratulations...

- to Cicely Macnamara and James Threlfall on the safe arrival of baby Isaac James at 10.26am on 2nd November. Isaac weighed 7lbs 15oz and both mum and baby recovered well. The whole family are enjoying precious early days together at home and really appreciate the massive amount of support received from the School.
- to Peter Cameron who received the certificate for the London Mathematical Society's Senior Whitehead Prize from the LMS president, Simon Tavaré, at the LMS AGM in London on 9th November.

Cicely, James and Isaac



Grants

- Rebecca Waldecker, Chris Jefferson, and Markus Pfeiffer have secured a grant from the German VolkswagenStiftung Foundation to develop Graph Backtrack. This will fund an 18 month postdoc position in Halle (Saale), Germany.

Visitors

- Prof Michael Giudici of the University of Western Australia visited the department from 16-20th November to work with Colva Roney-Dougal on showing that a finite simple automorphic loop is in fact just a group.
- Natalie Cooper and Ellen Coombs from the Natural History Museum in London visited David Miller to work on modelling of UK cetacean strandings data.

Visits and conferences

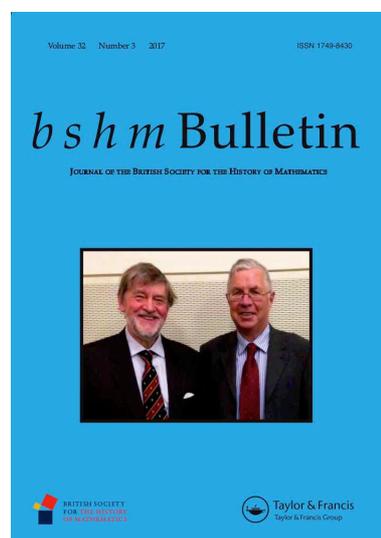
- Jon Fraser, Doug Howroyd and Han Wu are taking part the programme *Fractal Geometry and Dynamics*, for which Kenneth Falconer is co-organiser, at the Mittag-Leffler Institute on the outskirts of Stockholm. Jon, Doug and Han have given/will give seminars during their visits. Also participating are several former members of the School: Demi Allen, Ábel Farkas, Xiong Jin, Tom Kempton, Tony Samuel and Sascha Troscheit. The programme provides opportunities for interaction with other experts, for continuing existing collaborations and setting up new ones, or for just finding a hidden corner of the wonderful Institute building conducive to deep thought and concentration.
- Han Wu visited Oberwolfach, Germany from 8-13th October for a workshop on *Additive Combinatorics and Fractal Geometry*. Han also gave seminars in York on 24th October and in Manchester on 2nd November about Fourier analytic methods and inhomogeneous metric Diophantine approximation.

- Mike Todd made a week-long visit to south-west England, and gave seminars at the Universities of Exeter and Bristol where he also had discussions with research colleagues.
- Nik Ruskuc visited James East at the Western Sydney University from 30th October-11th November and will be travelling on to see Peter Mayr at the University of Colorado Boulder at the end of November.
- On 9th November Louis Theran gave a colloquium at NUI Galway on ‘Unlabeled rigidity problems’.
- Colva Roney-Dougal attended the conference *Topics on Groups and their Representations* <http://www.matapp.unimib.it/~ldm70/> at the Palazzo Feltrinelli, Gargnano sul Garda, Italy, from 9th-11th October. She gave an invited talk ‘Generation of finite groups, with applications to computing normalisers’.
- Sophie Huczynska visited Royal Holloway, University of London, on 26-27th October, where she was hosted by Siaw-Lynn Ng. She gave an *Information Security Group Research Seminar* entitled ‘Strong external difference families - some recent results’, then stayed on to do research with Siaw-Lynn and Maura Paterson at Birkbeck, University of London.
- Markus Pfeiffer gave a talk at the *York Semigroups Seminar* on 8th November entitled ‘Computing with Transformations: Groups and Semigroups’.
- Patrick Antolin visited the Institute for Solar Physics at the Department of Astronomy of Stockholm University from 6-10th November. He continued his collaborative research with Gregal Vissers on observations from the SST (Swedish 1-meter Solar Telescope) of a magnificent prominence eruption from the Sun.
- During a recent research visit Andy Lynch spoke at the *Cambridge Prostate Cancer Research Forum* on ‘Genetic stratification in prostate cancer’ on 18th October.
- During Independent Learning Week, several members of CREEM attended the *Society for Marine Mammalogy* biennial meeting in Halifax, Nova Scotia. As well as talks and posters on statistical methods development and analyses applied to marine mammals, the start-up meeting for a 4 year project on density surface modelling (DenMod) took place on the weekend before the conference, and two public workshops, on analysis of animal-borne tag data, and on passive acoustic monitoring, on the weekend after. Making the trip were Gui Bortolotto, Catriona Harris, Phil Hammond, Danielle Harris, Tiago Marques, Dave Miller (to be employed on the DenMod project from January) and Len Thomas. Former members of CREEM attending the conference included Leslie New, Stacy DeRuiter and Rob Schick, with a nice reunion party one evening.

Other News

- Martyn Quick has been appointed Deputy Convener of the Editorial Board of the Proceedings of the Edinburgh Mathematical Society.
- Not quite *Time* magazine, but John O'Connor and Edmund Roberson feature on the cover of the latest *Bulletin of the British Society for the History of Mathematics*. This special issue of BSHM Bulletin, guest edited by Isobel Falconer, presents a selection of papers based on those given at the meeting *Mathematical Biography: A MacTutor Celebration*, held at the University of St Andrews on 16-17th September 2016 which celebrated the *MacTutor* history of mathematics website.

Edmund and John on the BSHM Bulletin cover



- Edmund Robertson appeared on STV's *The People's History Show* on Monday 6th November talking about the life and work of Mary Somerville, see <http://player.stv.tv/summary/peoples-history/> It was filmed about two weeks earlier in the Parish Church in Burntisland where Mary Somerville was brought up. Mary Somerville (1780-1872) was a mathematician and astronomer whose works included *The Mechanism of the Heavens*, a translation and interpretation of Laplace's *Mécanique Céleste*, and *On the Connexion of the Physical Sciences*, see <http://www-history.mcs.st-andrews.ac.uk/Biographies/Somerville.html> Following a popular, vote she features on the new Royal Bank of Scotland £10 note.

Future Events

- This semester's History of Mathematics lecture will be at 4pm on 22nd November, when Tony Royle (Open University) will talk on 'The Perilous Practice of Flying and Applying'. He will discuss how early aeronautical research in Britain was advanced by allowing a number of the nation's finest mathematicians to train as pilots and conduct airborne experiments using full-scale aircraft, and he will consider what justified the risk, given that many would subsequently perish in flying accidents.
- Mark Chaplain will give his Inaugural Lecture on Wednesday 11th April 2018 – colleagues are encouraged to note the date in their diaries.

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.