

School of Mathematics and Statistics

Newsletter

December 2016

Congratulations to ...

- Vuksan Mijovic who successfully passed his PhD viva on 13th December for his dissertation “Multifractal zeta functions”.
- Zoe Sturrock who successfully defended her thesis “Numerical simulations of sunspot rotation driven by magnetic flux emergence”; the external examiner was Lyndsay Fletcher from Glasgow.

Farewell to ...

- Tom Kempton, who has been a lively member of our Analysis Group for the past three years, leaves us to take up a lectureship at the University of Manchester from 1st January. We wish Tom and Aspa the very best for the future, both academically and for their impending nuptials.

Conferences and Visits

- To mark his Leverhulme Fellowship, Jonathan Fraser attended the annual Leverhulme Trust reception and dinner in London. The dinner was hosted by Leverhulme Trust Chairman, Niall Fitzgerald and Trust Director, Gordon Marshall, and involved an in-depth discussion about the impact of Brexit on UK academics.
- Oliver Allanson attended the *American Geophysical Union Fall Meeting* in San Francisco on 12-16th December where he presented work on the theory of collisionless plasma equilibria and discussed projects on this theme with collaborators from NASA Goddard Space Flight Center. He was supported by a travel grant by the Royal Astronomical Society.
- Isobel Falconer gave an invited talk in Birmingham at the Christmas Meeting of the British Society for the History of Mathematics. She spoke on ‘James Clerk Maxwell and the inverse square law of electrostatics’.
- On 15-16th December, Peter Cameron and Mark Chaplain spoke at the LMS-sponsored *Prospects in Mathematics* meeting in York for final year undergraduates considering embarking on PhDs.
- Michael Papatomas gave a seminar on 2nd December at the Open University with the title ‘Exploring dependence between categorical variables: benefits and limitations of using variable selection within Bayesian clustering.’ He also gave a talk with the same title at an invited session at the *CFE-CMStatistics 2016* (Computational and Financial Econometrics – Computation and Methodological Statistics) conference in Seville, 9-11th December.
- Ineke De Moortel visited the Lockheed Martin Solar Astrophysics Lab in Palo Alto, California, from 16th-23rd November to work with Dr Bart De Pontieu on the analysis of observational data.
- Paolo Pagano, Mats Wallberg and Ineke De Moortel attended a course on Radiative Transfer given by Dr Rob Rutten and organised by Northumbria University from 29th November – 2nd December.
- On 23rd November Rosemary Bailey attended a half-day meeting of the British and Irish Region of the *International Biometric Society* held in the London on the theme of Design of Experiments in Medicine. She spoke about “Design of dose-escalation trials: research spurred by a trial that went wrong”.

- Alexander Konovalov has completed the training and become a certified instructor for Software Carpentry <https://software-carpentry.org/> and Data Carpentry <http://www.datacarpentry.org/>. These two organisations develop and teach workshops on fundamental computing, automation and data handling skills needed to conduct research. In particular, he developed a Software Carpentry lesson “Programming with GAP” <http://alex-konovalov.github.io/gap-lesson/>, now published on Zenodo at <http://doi.org/10.5281/zenodo.167362>. He has taught this lesson at CoDiMa training schools, most recently in October in Edinburgh, see the October Newsletter and <http://www.codima.ac.uk/2016/12/15/codima2016-report/> In January, Alexander and Markus Pfeiffer are organising a further workshop in Edinburgh *Computational Mathematics with Jupyter* for those interested in SageMath, GAP, Singular, Python, Jupyter for research and/or teaching, see <http://opendreamkit.org/meetings/2017-01-16-ICMS/>
- Chris Jefferson and Markus Pfeiffer attended the *Nikolaus Conference 2016* in Aachen on group theory to present their joint work with Rebecca Waldecker on search in permutation groups.

Future Events

- On 24-27th July 2017, there will be a conference in Lisbon celebrating Peter Cameron’s 70th birthday, at a meeting entitled *All kinds of mathematics remind me of you*, see <http://cameron17.campus.ciencias.ulisboa.pt/>
- The *British Colloquium for Theoretical Computer Science (BCTCS) 2017* will be hosted by the Schools of Computer Science and of Mathematics and Statistics from 26-28th April. The LMS Distinguished Speaker for Discrete Mathematics, Laszlo Babai, who will talk about his recent results on the graph isomorphism problem, and there will be seminar style sessions for people with a deeper interest in the problem. See <https://bctcs2017.cs.st-andrews.ac.uk>.

Caption Competition

- Captions are invited for this picture taken by JMF at the School Christmas lunch. If you have any ideas for captions, send them to the Newsletter editor at schoolnews@mcs.st-andrews.ac.uk – a selection may be published in the next Newsletter.



Next Issue

- The next edition of the School Newsletter will be circulated in mid-January. 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.

... and a Happy Christmas to our readers!