

School of Mathematics and Statistics

Newsletter

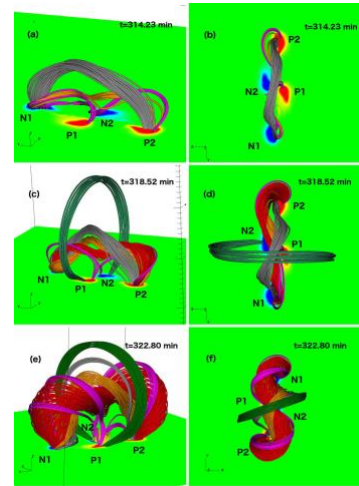
October 2019

Congratulations ...

- to Vassilis Archontis, Petros Syntelis, Callum Fairbairn, Alan Hood and Eon Lee, whose paper ‘Eruptions and flaring activity in emerging quadrupolar regions’ was featured on the (electronic) front cover of the October issue of *Astronomy and Astrophysics*.
- to Linnéa Franssen on a successful defence of her PhD thesis entitled ‘Mathematical modelling of cancer invasion and metastatic spread’ on 1st October.

Welcome ...

- to our new School Manager, Rachel Cumberland, who joined us in early October. She comes to us from the Business Transformation office and has previously worked in several other universities.
- to Rick Thomas who has moved to St Andrews and has been appointed Honorary Professor in the School. Rick has been visiting St Andrews since he came in 1981 for the first Groups St Andrews conference, indeed he is one of only four people who has attended all 10 Groups St Andrews meetings, the others being Colin Campbell, Edmund Robertson and Gerhard Rosenberger (Hamburg). Rick has a long history of research collaboration with members of the School, including Colin, Edmund and Nik Ruskuc.
- to our new Statistical Ecology PhD student Cal Fagard-Jenkin whom some may remember from his time as an MMath undergraduate from 2014-18 – he just couldn’t stay away!
- to Victor Velasco Pardo who started his PhD in October on ‘Statistical Underpinning of Cancer Mutational Signature Analyses’ in the Medical Statistics Group. He will be based at the Observatory.



Simulating eruptions and flaring activity in the Sun
(Syntelis, P., et al., 2019, A&A, 630, A134)

*The cover of October
Astronomy and Astrophysics*

Visitors

- Emlyn Williams from the Australian National University visited Rosemary Bailey and Peter Cameron for three days in September to finish work on a joint paper about designs for variety testing trials in agriculture.
- Peter Damiano, who was a postdoc here with Andy Wright around 15 years ago, is visiting for the week starting 14th October. Peter is an expert on simulations of wave particle interactions related to the aurora and is now based at the University of Alaska, Fairbanks.
- Richard Glennie, Catriona Harris, Theo Michelot and Len Thomas had the pleasure of hosting Alan Gelfand, Joshua Hewitt and CREEM alumnus Rob Schick for a week of discussing statistical models for the underwater movement of diving whales, as part of an ongoing project, Double MOCHA. Alan also gave a seminar on preferential sampling.

Meetings Organised

- Jon Fraser organised a one day meeting on *Fractal Geometry and Geometric Measure Theory*. The speakers were Pablo Shmerkin and Alexia Yavicoli, both currently visiting the School, and Mike Whittaker from the University of Glasgow.

- On 4th October John Acheson gave the *Edinburgh Mathematical Society Popular Lecture* ‘Mathematics, magic and playing the guitar’ in St Andrews. Chocolate and pizza boxes were used to demonstrate mathematical ideas to an audience that included undergraduates, members of the public and school students.

Visits and Conferences

- Fiona Macfarlane gave an invited seminar entitled ‘A stochastic individual-based model to explore the immune response against solid tumours’ at the *Centre for Mathematics Medicine and Biology (CMMB)* at the University of Nottingham on 8th October.
- Hannah Worthington visited the University of Kent, Canterbury, from 23rd-26th September, to work with Rachel McCrea and Julio Cesar de Souza on a project looking to estimate the number of jaguars using a region of farmland in Brazil. Whilst there she gave a seminar titled ‘Mark-recovery models with semi-Markov survival’.
- David Rees Jones attended the *Challenger Society Ocean Modelling* meeting 9-10th September in Edinburgh and gave a seminar entitled ‘Changes in light and photosynthetic life beneath Arctic sea ice’.
- Jon Fraser visited the University of Warwick to examine the PhD thesis of Alex Margaris (who was successful).

Public Engagement

- On 18th September, Jon Fraser and Valentine Popov performed at the *Bright Club* at the Byer Theatre. The Bright Club brings together researchers from all subject areas to present ‘stand-up comedy with an academic twist by some of the funniest clever people around!’.
- The Outreach and Engagement team continue to arrange outreach trips schools As part of *Maths Week Scotland*, Louis Theran gave a talk at Balwearie High School in Kirkcaldy. Later this semester Lars Olsen will visit Balwearie High School and there will be a visit to St Leonards School in St Andrews.

New MacTutor

- We have spent the summer migrating the *MacTutor History of Maths Archive* onto an up-to-date software architecture, which should ensure ongoing sustainability of the site, with many thanks due to David Ferguson and Tricia Heggie who have done much of the hard work. The move, and some clever conversion work by Ben Soares, a former PhD student in the School, has re-enabled the ‘famous curves’ section, with interactive curves to play with.

We still have some stylistic tweaks to make, but the major work is done, and is ready for members of the School to try out at <http://mathshistory-preview.mcs.st-andrews.ac.uk/> before releasing it to the public. At the moment you will only be able to reach this if you are within the university, or logged in through VPN.

There will be a Search function, but it cannot be implemented on this demo version. Other functionality should be working properly. Let us know what you like, as well as what you don’t like - and please let us know if you find any bugs in the demo - email to <mailto:mathshistory@st-andrews.ac.uk>

Next Issue

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