

## ACADEMIC NEWS

### DAMTP:

The Faculty would like to extend their welcome to *Dr Enrico Pajer*, a University Lecturer, who has recently joined the Relativity & Gravitation Group in DAMTP.

*John D Barrow* has been elected an Honorary Fellow of [Gresham College](#), London.

*Stephen Eglen* has been appointed as a Turing Fellow by the Alan Turing Institute for the duration of two years starting on 1 October 2018. His area of research will be 'Applications of deep learning for understanding the development of the visual system'.

*Julia Gog* has received one of this year's [Vice Chancellor's Impact Awards](#) for her work on 'Harnessing mathematics to help control influenza'. The Vice-Chancellor's Impact Awards were established to recognise and reward those whose research has led to excellent impact beyond academia, whether on the economy, society, culture, public policy or services, health, the environment or quality of life. Each winner receives a prize of £1,000 and a trophy. Julia's work on predicting the evolution of the seasonal human influenza virus to better inform vaccination selection is critical to controlling the spread of influenza each year. Julia worked with data gathered through the [BBC's Pandemic project](#) to produce mathematical modelling that helps predict how UK populations move and interact, and consequently how and where a virus would spread. Julia received assistance with writing her application for the Vice Chancellor's Impact Awards from *Milla Kibble*, the [DAMTP Research Facilitator](#).

*David Tong* has recently been appointed as a [Simons Investigator in Physics](#) for a five year period by the Simons Foundation, and he will use the appointment to continue his research on quantum field theory and the role this plays in physics and mathematics.

MMP's Plus editors, *Rachel Thomas* and *Marianne Freiberger*, are currently at the International Congress of Mathematicians (ICM) to cover the event in a collaboration with the London Mathematical Society. Recent coverage from over the weekend includes a report on the award of a [replacement Fields medal](#) to Caucher Birkar, following the much-publicised theft of the original. You can find the ICM content stream, including video interviews with several of the prize winners, on the [+Plus magazine website](#).

### DPMMS

The Faculty would like to extend their welcome to the following new academic starters in DPMMS:

*Dr Ewain Gwynne*, a Herchel Smith Fellow, whose areas of research covers probability theory, especially statistical mechanics, Schramm-Loewner evolution, random planar maps, Liouville quantum gravity, and Brownian surfaces.

*Dr Ariel Rapaport*, a Herchel Smith Fellow, whose areas of research covers fractal geometry, probability and Ergodic theory.

The Department would like to congratulate *Caucher Birkar*, who has been announced as one of four winners of the [2018 Fields Medal](#) at the International Congress of Mathematics (ICM) in Rio de Janeiro. The Fields Medals are awarded every four years to the most promising mathematicians under the age of 40, and each winner receives a cash prize. Caucher is Cambridge's 11<sup>th</sup> Fields medallist.

*Richard Samworth* has recently been awarded the Committee of Presidents of Statistical Societies (COPSS) - [Presidents' Award 2018](#). The COPSS Presidents' Award is presented annually to a young member of the statistical community in recognition of outstanding contributions to the profession of statistics.

The Faculty would like to extend their congratulations to the following students who have recently completed their PhD's:

- Andreas Bode (DPMMS)
- Christopher Brown – (Environmental and Industrial Fluids)
- William Cook – (Relativity & Gravitation)
- Stefan David - (DPMMS)
- David Driver - (DPMMS – CCA)
- Julius Kirkegaard – (Biological Physics & Mechanics)
- Adrien Lefauve - (Environmental and Industrial Fluids)
- Sargam Mulay – (Atomics Astrophysics)
- Megan Stamper – (Dynamical Meteorology & Oceanography)
- Ridhwaan Suliman – (Fluid Mechanics)

## ANNOUNCEMENTS

### Royal Astronomical Society – Medal and Prizes 2019

Nominations are invited for the RAS Medals and Prizes to be awarded in January 2019.

- **A** - astronomy and astrophysics, broadly defined, including cosmology, astroparticle physics, astrobiology and astrochemistry
- **G** - geophysics, solar physics, solar-terrestrial physics, planetary science and meteoritics

The deadline for nomination this year has been extended to *Monday 20<sup>th</sup> August 2018*, with the exception of the Patrick Moore Medal and the Annie Maunder Medal for Outreach, which have a deadline of *Friday 28<sup>th</sup> September 2018*. A list of [awards available this year](#) can be found on the Royal Astronomical Society website.

### Call for Royal Astronomical Society Research Fellowships 2019

Applications for a RAS Research Fellowships, to begin on 1<sup>st</sup> October 2019 or within 6 months thereafter, are now open online. The Fellowships provide post-doctoral funding for up to three years, and are offered to outstanding candidates to enable them to pursue research in the UK in the disciplines advanced by the RAS i.e. astronomy, solar system science, geophysics and closely related branches of these sciences. Applicants must have been awarded their PhD between 1<sup>st</sup> October 2014 and 1<sup>st</sup> October 2019. More details on how to apply, and the Terms & Conditions of the Fellowships are available on the [RAS Research Fellowships page](#) on the RAS website.

## EVENTS

### European Study Group with Industry (ESGI) at CMS in 2019 **SAVE THE DATE!**

*Monday 8<sup>th</sup> – Friday 12<sup>th</sup> April 2019*

The Study Group five day workshop brings together mathematicians and industrialists to work side by side to solve a variety of real and important problems that companies are facing today. Next year's event (number 145) will be hosted by the Centre for Mathematical Sciences, University of Cambridge. Please save the date as all academic staff, research staff and PhD students are welcome to attend.

This year's 138<sup>th</sup> ESGI took place Monday 16<sup>th</sup> – Friday 20<sup>th</sup> July at the University of Bath. Scientists and engineers from PepsiCo, Airbus, Heathrow, Syngenta, Phytoponics, Crowd Vision and the NHS presented a diverse range of [eight challenges](#) including:

- Dialogue classifiers to improve access to mental health (NHS)
- New techniques for composite wing manufacture (Airbus)
- Robustness of fabricated snack take-off (Pepsi, i.e. frying of crisps, free samples supplied)

Mathematicians decided which problem they wanted to investigate and split into groups to work on the problems during the week. The groups gathered together on the final day to present their findings.

The first study group was held in Oxford in 1968, and the Bath week marked 50 years of interactions between mathematicians and industrialists. Over the years this concept has proved to be a successful mechanism for industrial collaboration and finding solutions for real problems. If you would like to know more about next year's ESGI, please mail [esgi@maths.cam.ac.uk](mailto:esgi@maths.cam.ac.uk) or [Stephanie North](#).

This photograph of the one of the groups from this year's event, and includes the following members of DAMTP:  
*Stephen Cowley (2<sup>nd</sup> left), Peter Baddoo (5<sup>th</sup> left), and Christopher Sear (2<sup>nd</sup> right).*  
(Credit: Stephanie North)



## Research Data Management workshops FOR GRADUATE STUDENTS

The Office of Scholarly Communication are offering two workshops on the principles of Research Data Management (RDM) and their relevance throughout the research life cycle. Both workshops are designed for STEM graduate students, although other researchers are welcome. Places should be booked by the links below.

- [Effective strategies for managing your research data](#) (Beginners session)  
*Monday 3<sup>rd</sup> September, 10.00 am-12noon, 8 Mill Lane, Lecture Room 5*
- [Effective strategies for managing your research data](#) (Advanced session)  
*Wednesday 5<sup>th</sup> September, 2.00pm-4.00pm, 8 Mill Lane, Lecture Room 5*

NB: Both courses are currently booked up, but it is worth adding your name to the waiting lists as there may well be spaces nearer the dates.

## GENERAL INFORMATION

### News bulletin - Long Vacation publication dates

The next Faculty News Bulletin will be published on *Monday 3<sup>rd</sup> September*. If there is anything you would like included in these issues please email [Faith Payne](mailto:Faith Payne) by the preceding Wednesday.

### Summer at the Museums

*Wednesday 25<sup>th</sup> July – Monday 3<sup>rd</sup> September*

Summer at the Museums have plenty of free or low-cost activities to keep everyone happy over the summer holidays. Their [‘What’s On’ guide](#) provides full details on all activities, and up-to-date information will be posted on [Twitter](#).

## LOCAL ENVIRONMENT & SUSTAINABILITY

### Cycle to Work Day 2018

Cycle to Work Day takes place *Wednesday 15<sup>th</sup> August* and details on what events will be taking place can be found on the [Cycle to Work Day](#) webpage. Please note all these events are only available to University employed staff.

### Mobile ticketing for buses (M-Tickets)

You can now purchase tickets for the [Universal U and Guided Busway C](#) routes on i-Phones or Android phones, using a credit or debit card. Simply search for ‘Whippet m-ticket’ in the App Store or in Google Play and download the App. Full details are available on the [Whippet web page](#).