

FACULTY NEWS BULLETIN

12 August 2021

ANNOUNCEMENTS

The Faculty would like to welcome Sourav Sarker who has recently joined us as a University Lecturer and Sue Screation who joins us as a Finance Assistant, both in DPMMS.



PhD Approvals

Many congratulations to the following students who have recently completed their PhD's:

Charles Board	DAMTP	Unusual Matter Models in Cosmology
Nigel Burke	DPMMS	Homotopy Theory of Monoids and Group Completion
Peter Faul	DPMMS	Monoid Extensions, Relaxed Actions and Cohomology
Aron Kovacs	DAMTP	The Cauchy problem and the initial data problem in effective theories of gravity
Jack Williams	DAMTP	Twistors and Tractors in Field Theory
Jiali Yan	DPMMS	Computing the Cassels-Tate Pairing for Jacobian Varieties of Genus Two Curves

Many congratulations to the following members of the Faculty for their achievements:

Maria Ubiali and Jessica Fintzen who were both awarded [ERC Starting Grants](#) in September 2020.

Sir John Aston, Harding Professor of Statistics in Public Life, who has been knighted for services to Statistics and Public Policymaking in the [Queen's Birthday Honours List](#).

Helen Mason and the SunSpaceArt Team who won the [Sir Arthur Clarke Award for Education and Outreach Team Space Achievement](#).

Ailsa Keating who has been awarded a [Berwick Prize](#) for the paper 'Dehn twists and free subgroups of symplectic mapping class groups', published in the *Journal of Topology*.

2021 Thomas Bond Sprague Prize

The Trustees give notice of the award of the 2021 Thomas Bond Sprague Prize for the Master of Mathematics/ Master of Advanced Studies in Mathematics examinations, to P. Bevan of Queens' College for distinguished performance in the areas of statistics and information theory.

Congratulations to Dr Anna Kiesenhofer (M.A.St for Part III Maths in 2012) on her [Olympic Gold Medal](#) in the Women's Individual Cycling Road Race in Tokyo.

BloodCounts! Consortium wins Trinity Challenge Prize for breakthrough in infectious disease detection

[BloodCounts!](#) - an international consortium of scientists, led by Professor Carola-Bibiane Schönlieb, has been awarded a substantial prize by the Trinity Challenge to further develop their innovative infectious disease outbreak detection system.

The loss of 3.8 million lives in the ongoing COVID-19 pandemic has highlighted that there is a critical need for simple, affordable, and scalable technologies for early detection of novel emerging infectious disease outbreaks. To drive development of these tools the Trinity Challenge, a global call for solutions to this problem, was set.

The BloodCounts! solution, developed by Dr Michael Roberts and Dr Nicholas Gleadall, uses data from routine blood tests and powerful AI-based techniques to provide a "Tsunami-like" early warning system for novel disease outbreaks.

Million-patient study shows strength of machine learning in recommending breast cancer therapies

An extensive new study published on June 24 in *Nature Machine Intelligence* shows that a prognostic tool developed by the [van der Schaar Lab](#) can recommend therapies for breast cancer patients more reliably than methods that are currently considered international clinical best practice. The study makes unprecedented use of complex, high-quality cancer datasets from the U.K. and U.S. to demonstrate the accuracy of Adjutorium, a machine learning system for prognostication and treatment benefit prediction.

Latest News from NRICH

The NRICH team recently contributed to Maths Week London. More than 200 classes of students aged 9 to 13 participated in the webinar that challenged students to think strategically. The recording of the event, together with links to the NRICH problems which were presented, is available at <https://nrich.maths.org/mwl2021>.

NRICH is also publishing a mathematical problem-solving challenge a day for school students, throughout the summer break. Each weekday until 31 August, a new game or puzzle will appear on [this Primary page](#) (for ages 5-11) and [this Secondary page](#) (for ages 11-16). After students have had a go at the day's challenge they will be able to compare their approach to the published solutions, which are based on students' work.

CTC scientists star in new film on black holes

Scientists from the Centre for Theoretical Cosmology, including the late Stephen Hawking, star in a [recently-released documentary on black holes](#). The film, *Black Holes: The Edge of All We Know*, was four years in the making and follows the efforts of two scientific teams as they attempt to understand the most mysterious objects in the universe. Many of the scenes were shot before Stephen Hawking's death in early 2018, and show him collaborating with fellow CTC researchers Professor Malcolm Perry and Sasha Haco (then a PhD student) as well as Harvard's Andrew Strominger, a long-term colleague of Professor Hawking and a member of the Scientific Advisory Committee of the CTC since its inception in 2007. *Black Holes: The Edge of All We Know* can be seen on Netflix and Apple TV, and is also available on DVD and Blu-Ray.

Hawking Archive

Cambridge University Library has acquired the late [Stephen Hawking's personal archive](#). This includes around 10,000 pages of letters, scientific papers and scripts of his media appearances.

EVENTS



Summer with the Museums

Until Tuesday 31 August

For family days out or fun activities to do at home, Summer with the Museums is back. This year, the museums will be offering a range of events, activities, trails and resources both in-person and online. See the full programme [here](#).

Suicide Prevention Day

10 September 12.30pm-1.30pm

To mark World Suicide Prevention Day 2021, this presentation, 'Suicide could impact your life at any time and without warning. But is suicide inevitable?' delivered by **Yvonne McPartland** and **Sarah Hughes** from the Staff Counselling Centre, aims to inform you of the facts and myths around suicide. Book your place [here](#).

Postdoc Welcome Event

16 September, 10am

This is a virtual session with information tailored to new postdocs in Cambridge. At this event, information will be given about:

- Your contract
- Professional development and the Careers Service
- How to connect to the wider postdoc community at Cambridge

There will also be the opportunity to meet representatives from various University services who may be helpful to you while you are working in Cambridge. Book a place [here](#).

GENERAL INFORMATION

Travel on University Business

The University's advice on [planning to travel on University business](#) is now available on the Staff Sharepoint pages. If you are considering such travel, please review this information.

The COVID Helpdesk is available to assist with guidance and information on COVID-related risks with planning overseas travel. Staff are strongly advised to contact the Helpdesk on 01223 339514 or covid-helpdesk@admin.cam.ac.uk as a first step in their planning, as quarantine and testing requirements vary significantly from country to country, and change frequently.

Academic Career Pathways (Teaching and Research) 2022 scheme

Ahead of the launch of the Academic Career Pathways (Teaching and Research) 2022 scheme in September 2021, [full scheme guidance is now available](#) on the HR webpages. The guidance includes information for prospective applicants, Heads of Institution and committee members. Queries on the scheme can be directed to ACP@admin.cam.ac.uk.

CMS Covid Guidance

When the Government decided to lift most legal Covid-related restrictions from Monday 19 July, the CMS Building Taskforce reconvened and have replaced the 'CMS Covid Return to Work Protocol' with 'CMS Covid Guidance.'

Please regularly check [online](#) for the most-up-to-date version.

Absence Reporting

A reminder that if you are unwell and are unable to work, on your return, please complete a [sickness self certificate](#). Once this has been signed by your line manager, please send to absence@maths.cam.ac.uk.
