

## ACADEMIC NEWS

- The [Centre for Theoretical Cosmology](#) (CTC) has reported on the LIGO Scientific Collaboration announcement that they have directly detected gravitational waves, ripples in the spacetime fabric of our universe predicted by Einstein's theory of general relativity, ushering in a new era of gravitational astrophysics. CTC also includes a link to [Stephen Hawking's interview with Pallab Ghosh](#) from the BBC about this news.
- *Markus Kunesh* and *Saran Tunyasuvunakool*, along with co-author Pau Figueras from Queen Mary University of London, have successfully simulated how a ring-shaped black hole could cause general relativity to break down if the universe contains at least five dimensions. Full details on this research can be read on the University's [research news page](#).
- *Ron Horgan* has designed two Brillouin zone outlines in a contribution to the mathematical colouring book "[Snowflake, Seashell, Star](#)" by Alex Bellos and Edmund Harriss (published September 2015). He has also given a brief explanation of the connection of Brillouin zones to electrons in a crystal.

## ANNOUNCEMENTS

### Cambridge Science Festival

This year's [Cambridge Science Festival](#) runs from *Monday 7<sup>th</sup> March - Sunday 20<sup>th</sup> March 2016*, and as usual features a huge range of events for all ages, including several mathematics talks given by both members of the Faculty and external speakers. Some events require pre-booking, and booking opened on *Monday 8<sup>th</sup> February*. MMP will be running a large [family maths event](#) and accompanying talks in the CMS on *Saturday 19<sup>th</sup> March 2016*. You are warmly invited to bring your families to join in!



**Mathematics and Big Data  
Showcase, Wednesday 20<sup>th</sup> April  
2016 at CMS**

Your chance to be involved in the exhibition  
and build connections

CMS is hosting a one day event to showcase the diversity and impact of mathematical research in Cambridge to people from business, industry, policy makers, government, academia and funding bodies. The programme includes short lectures for visiting delegates and an exhibition.

Do you want to contribute?

This is a great opportunity for CMS staff and researchers to meet and network with the visitors.  
Your posters and exhibits are required to make the day a success.  
We need a variety of research topics from DAMTP and DPMMS.  
To register your exhibit, please contact Lissie Hope  
[l.hope@turing-gateway.cam.ac.uk](mailto:l.hope@turing-gateway.cam.ac.uk)

Send your name and provisional poster title by 4<sup>th</sup> March 2016.  
Final title and abstract are required by 6<sup>th</sup> April 2016.

The Showcase is being organised jointly by CMS, The Turing Gateway to Mathematics, and Cambridge Big Data. Please contact Stephanie North [sn468@cam.ac.uk](mailto:sn468@cam.ac.uk) with any questions.

 UNIVERSITY OF CAMBRIDGE 

## The Cambridge Green Challenge - University's Sidgwick Site to host annual electronic recycling event

Leap into recycling action by dropping off your broken or unwanted electronics at a two-day event at *Sidgwick Site Car Park, Sidgwick Avenue* on *Monday 29<sup>th</sup> February* (from 7.30am – 5.00pm) and *Tuesday 1<sup>st</sup> March 2016* (from 7.30am - 3.30pm).

The event provides free e-waste drop off for businesses, colleges, residents and schools and all items collected will be recycled. The event is conveniently located on the University Campus, and is easily accessible by bicycle, public transport, as well as vehicles, making it the perfect opportunity for those who may be putting off recycling their electronics. All types of business and household electronic waste will be accepted for free and staff will be on hand to help with unloading.

## 2016 L'Oreal-Unesco Women in Science Fellowships

Applications are now open for the [2016 L'Oreal-Unesco Women in Science Fellowships](#). Mathematics was included as an eligible discipline for these awards for the first time in 2015 and the organisers are keen to attract as many applications as possible from female mathematicians. The fellowships are open to women without a permanent position who have less than 10 years postdoctoral full-time experience. They cover a period of 12 months and offer £15,000 to be used to support the applicant's research career. This money can be used very flexibly to cover a range of costs such as travel and childcare. Applicants are judged on three criteria: their intellectual ability, the strength of their research proposal, and the difference that the fellowship will make to their career. The closing date for applications is *Friday 11<sup>th</sup> March*.

## EVENTS

### Buzz Aldrin Lecture – 'Cycling pathways to occupy Mars'

Buzz Aldrin will be presenting this lecture on *Friday 26<sup>th</sup> February, 5.30pm – 6.30pm* in *MR2 / MR3*.

The lecture will be followed by a wine reception in Central Core.

**Abstract:** 'A comprehensive and immediate plan for human spaceflight. The overall objectives of this plan are to sequentially evolve international contributions of shared exploration beyond low Earth orbit and toward bartered crew landing on Mars by 2040. This plan can grow to enable a permanent settlement on the Red Planet by mid-century'.

**Please note:** this is an un-ticketed event. If you are planning to attend you need to complete the Doodle poll (sent out by June Wilders on Thursday 18<sup>th</sup> February), by 5.00pm on *Tuesday 23<sup>rd</sup> February*. Seating will be on a first come first served basis.

## Andrew Chamblin Memorial Lecture 2016

The tenth Andrew Chamblin Memorial Lecture, entitled "**Harnessing the Quantum World**", will be given by **Professor Raymond Laflamme** at 5.00pm on *Wednesday 16<sup>th</sup> March* in *Lady Mitchell Hall, Sidgwick Avenue*. Admission is free of charge by ticket available via the website:

<http://www.eventbrite.co.uk/e/andrew-chamblin-memorial-lecture-harnessing-the-quantum-world-tickets-19753349801>

## Our Digital Future – Multidisciplinary Perspectives on Long Term Data Preservation and Access

*Monday 14<sup>th</sup> – Tuesday 15<sup>th</sup> March 2016, at Murray Edwards College, Buckingham House*

As the worldwide volume of digital data undergoes exponential growth, Big Data technology allows unexpected value to be derived from existing and new datasets, and increasingly huge datasets to be recorded across all areas of academic research.

Decisions will need to be made about which data is kept, how it is stored, and how it can be accessed, in order that the scientific and human record from the current digital age is appropriately preserved for the future. With keynote speakers representing disciplines ranging from high energy physics to digital humanities, from bioinformatics to libraries, this two-day conference will address perspectives from technology, policy and the social sciences on data as our human record. This conference is open to researchers, students, practitioners and policymakers interested in the preservation of digital data and who wish to inform a roadmap for research and funding in this area. If you wish to attend this conference you will need to register by *Monday 29<sup>th</sup> February* via the [Cambridge Big Data](#) website, where you can find also full details of the conference programme.



### **The Emmy Noether Society (ENS) - First Varsity event**

*Saturday 27<sup>th</sup> February, 11.30am - 3.00pm at Hughes Hall.*

This event will consist of:

- *11.30am - 1.00pm*: Lunch (now fully booked)
- *1.00pm – 3.00pm*: Short talks by Perla Sousi (DPMMS), Christie Marr (INI) and Anne Davis (DAMTP), followed by tea and coffee and discussion time. Everyone is welcome to the talks even though all the lunch places are booked.

The University of Cambridge Emmy Noether Society aims to promote women studying mathematical sciences, and they host talks from female mathematicians and informal events between students and academics, from both Cambridge and other universities. Full details can be found on their [website](#) or their [Facebook](#) page.

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### **Bright Club Cambridge Science Festival**

*Thursday 10<sup>th</sup> March at The Portland Arms pub. Doors open at 7.30pm and the event starts at 8.00pm.*

Described as ‘the thinking person's variety night’, special guests Rosie Wilby and headline act Jonny Berlinger will be on stage alongside fellows and researchers giving stand-up comedy a go for the first time. Full details on this event and how to book tickets can be found on the [Bright Club](#) website.

## **GENERAL INFORMATION**

### **Betty & Gordon Moore Library**

- **New staff appointment** - Georgina Cronin ([gmp36@cam.ac.uk](mailto:gmp36@cam.ac.uk)) has been appointed to the role of Research Support Librarian, and she will be joining the Library team from the Monday 22<sup>nd</sup> February. Georgina will be providing support for members of the department on all aspects of Open Access, as well as providing assistance with bibliometric databases and the use of social media for research impact.
- **New services provided** - the library now has four [study pods](#) located on the lower-ground floor. These comfortable, acoustic pods are designed to provide screening and restrict external noise. Each one holds up to six people and has a large table with access to plugs for laptops, recharging phones, etc. They are ideal for group discussion, project work or meetings, or can be used for private study. They do not need to be pre-booked.
- **Current building work** - on Monday 22<sup>nd</sup> February a glass partition is being fitted to sound proof the area of the library adjacent to the window on the lower ground floor, which will create a quiet study space for library users. This should take less than two weeks to complete and disruption will be kept to a minimum. This area will then be suitable for seminars / supervisions and should be able to accommodate up to 60 people. A data projector and screen will also be installed once the initial work has been completed.

### **DAMTP Finance Team**

Please find below the Finance team's contact details:

- Libby Armstrong, Senior Accounts Clerk (B1.29) Email: [jec36@cam.ac.uk](mailto:jec36@cam.ac.uk) / Ext:37855
- Jonathan Foulkes, new DAMTP Accountant (B1.27) Email: [accountant@damtp.cam.ac.uk](mailto:accountant@damtp.cam.ac.uk) / Ext: 38092
- John Turner, DAMTP Accountant (B1.27) Email: [accountant@damtp.cam.ac.uk](mailto:accountant@damtp.cam.ac.uk) / Ext: 37854

### **DPMMS – New Departmental Administrator**

DPMMS have announced that Dr Vivien Gruar (nee Hodges) will be joining DPMMS as their new Departmental Administrator on Tuesday 19<sup>th</sup> April. Vivien comes from the Equality and Diversity Unit, Human Resources Division, and has already worked with Mathematics on Athena SWAN matters.

### **RCUK 2016 - Collection of Research Outcomes (*Researchfish*)**

If you are a **student** or **PI** in receipt of funding through RCUK then you should have already received notification. As a reminder, the Research Councils have announced that their next collection of output information via *Researchfish* will be from *Monday 1<sup>st</sup> February - Thursday 10<sup>th</sup> March 2016 (4.00pm)*. Data can be entered throughout the year *but has to be submitted during the collection period*. Failure to submit research outcomes may result in sanctions. Depending on the funder these may vary and include the inability to apply for further awards or award payments being withheld.

**\*\*NB:** Student recipients of RCUK funding are now also required to record their outcomes via *Researchfish*, although this year students will not be sanctioned for non-compliance. The expectation on receiving the award is that the PI or Student will report annually on the outcomes during the lifetime of the award, and then for a period of time afterwards (5 years for PI's, 3 years for students) so if you have received an email asking you to submit outcomes for an expired award, this is why. Information on these requirements can be found on the [University's Research Operations](#) webpage.

### **Tripes Examination helpers required**

The Undergraduate Office is currently recruiting helpers for the 2016 Mathematics Tripos examinations, which take place from *Tuesday 24<sup>th</sup> May - Wednesday 8<sup>th</sup> June*. They are particularly seeking PhD's and Postdoc's volunteers, but any reliable people with an eye for detail are most welcome too. Excellent rates of pay are offered for Invigilators, Mark checkers, Script sorters and Attendants. Please contact the Undergraduate Office at: [undergrad-office@maths.cam.ac.uk](mailto:undergrad-office@maths.cam.ac.uk) by *Friday 6<sup>th</sup> May* if you are interested in being involved.