

# FACULTY NEWS BULLETIN

3 February 2022

## ANNOUNCEMENTS

The Faculty would like to welcome Sally Baume who joined us as the Internship Co-ordinator in DPMMS on 1 February.



### PhD Approvals

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

Samuel Crew	DAMTP	Geometric aspects of three dimensional $N = 4$ gauge theories
Ward Haddadin	DAMTP	Invariant polynomials and machine learning
Benjamin Jackson	DAMTP	The dynamics and mixing properties of vortex rings obliquely impacting a density interface
Yuting Irene Li	DAMTP	Non-equilibrium phase separation in active matter

DAMTP is proud to host the new Institute of Computing for Climate Science (ICCS), led by Prof. Emily Shuckburgh (@Cambridge\_CL and @CambridgeZero) as part of @SchmidtFutures Virtual Institute of Scientific Software (VISS). To find out more see [here](#).

### Plus update

This year sees the *Plus* team continuing their ongoing collaborations with the JUNIPER modelling consortium, led by Julia Gog, and the Isaac Newton Institute, as well as beginning a new collaboration with the CCIMI and CMIH.

They have published more than 60 articles and podcasts across the JUNIPER and INI collaborations over the last year. A recent example of this work, and how these collaborations can successfully weave together, is an article explaining [why the generation time of COVID-19](#) is important.

This work provides an opportunity for researchers to directly collaborate with *Plus* to disseminate their work to the wider public and to policy makers; some of the *Plus* teams articles have been linked to directly from government guidance on COVID-19 and included as references in SAGE documents.

They are delighted with the positive feedback they've had on this work from researchers and the wider community. You can find all the content from INI and JUNIPER collaborations at <https://plus.maths.org/content/ini> and <https://plus.maths.org/content/juniper>.

### Her Maths Story

On the 20 January, [Her Maths Story](#), edited by two former DAMTP PhD student Joana Grah and Tamara Grossmann, celebrated their first anniversary. Her Maths Story publishes bi-weekly stories about women mathematicians who give insights into their maths journeys and has also introduced a blog section on their webpage for a wide range of topics related to women in mathematics.

DAMTP's Ben Allanach recently gave an interview on his research in the [New Scientist](#) cover story.

### Misinformation and the Internet

Misinformation about scientific issues, from vaccine safety to climate change, can cause harm to individuals and society at large. DPMMS's Frank Kelly's [blog post](#) introduces the new Royal Society Report on the Online Information Environment.

### Upcoming training from the Moore Library

The Moore Library continues to offer a range of both live and self-paced online learning. You can find out about all their sessions on the [dedicated LibGuide](#) or drop them a line at [moore-rso@lib.cam.ac.uk](mailto:moore-rso@lib.cam.ac.uk) for one to one help.

If you have anything you would like to be included in the next News Bulletin please send details to [newsbulletin@maths.cam.ac.uk](mailto:newsbulletin@maths.cam.ac.uk) by Wednesday 9 February 2022. **The next issue will be published in W/C 14 February.**

## Research Dashboard Upgrade

The [Research Dashboard](#) is a web-based application which gives Researchers an overview of their applications, grants and contracts. When you open the tool you are required to use Raven authentication. This authentication process was upgraded on 27 January 2022 to the latest version using Google Cloud Identity. Therefore you may see an additional window pop up about signing in. Please follow the instructions on the [UIS website](#) about what you need to do.

The upgrade will also include the latest 2021 pay scales which will be added to the Dashboard and means that the 'Staff Commitments' figures may change slightly. If you have any questions about this, please email [UISResearchSystemsTeam@admin.cam.ac.uk](mailto:UISResearchSystemsTeam@admin.cam.ac.uk).

## EVENTS

### From Math to Medicines: Accelerating Drug Discovery, Development and Repositioning using Clinical Trial Data Mining and Machine Intelligence 10 February, 4pm

The student chapter of SIAM (Society of Industrial and Applied Mathematics) and CCIMI are hosting a virtual industrial research seminar 'From Math to Medicines: Accelerating Drug Discovery, Development and Repositioning using Clinical Trial Data Mining and Machine Intelligence,' with Dr Shameer Khader, Senior Director of Data Science, AstraZeneca.

The drug development process is a time-consuming and expensive endeavor. The application of data science and artificial intelligence methods could potentially improve drug discovery, development, and repositioning. Collectively, the application of big data tools and methods could help handle the high dimensionality of the data and help develop novel modelling strategies to link early experimental analysis to clinical outcomes. This talk will discuss three key ideas: novel methods for clinical trial data mining (SAEgnal, TrialGraph, ClinicalTrials2Vec), multi-omics data integration (Omicsfold and BlockRank) and digital drug repositioning. Drug development teams could use the collective insights and models to augment trials using data-driven approaches, improve patient engagement, optimize side effects, uncover novel indications, and ultimately accelerate drug discovery.

Zoom <https://maths-cam-ac-uk.zoom.us/j/93058414146?pwd=SW8yM05pVm9oVXNFsnZtWW8xLzQ3QT09>



### LGBT+ History Month 2022

LGBT+ History Month takes place every February to promote equality and increase the visibility of lesbian, gay, bisexual and transgender people, their history, lives and their experiences.

Activities and events are taking place throughout the University, for more information please visit [here](#).

### The Principal Investigator Programme – March 2022

The [Principal Investigator Programme](#) has been developed to help researchers with their responsibilities of managing a grant. Topics include

- protecting your research – intellectual property and publishing rights
- knowing when to seek ethics approval
- ensuring that your project is properly costed

The programme modules provide essential background information, tools and tips as well as online events with the presenters and other participants. Completion of the programme will help PIs to understand and implement the financial, ethical, legal and regulatory aspects of successful grant management. Presentations are now available and a series of live events are scheduled for March 2022, details of how to book your place can be found on the [Principal Investigator Programme page](#).



### Twilight with the Museums 14 - 20 February

You will find plenty of drop-in and bookable family events happening across the museums throughout half-term. Please visit the [What's On page](#) for more information.

## How to be an Active Bystander at Work

7 February, 11am -12.15pm

Have you ever been concerned about a situation and wanted to help, but didn't? Hearing a racist/sexist/homophobic joke in the tea room? Seeing an inappropriate touch of a friend? Watching a colleague wince at being belittled or interrupted in a team meeting? You're not alone, this is more common for many of us than you might think.

Come along to this short session to find out why this happens and what it means to be an active bystander. This includes simple changes and actions you can take to support others around you without confrontation and, over time, support a more inclusive environment for all of us to live and work in. To attend, book [here](#).

---

## Postdoc Welcome Event

8 February, 10am -11am

A must-attend virtual session with information tailored to postdocs in Cambridge. At this event, you will be given information about:

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

You will also meet representatives from various University services who may be helpful to you while you are working in Cambridge. To attend, book [here](#).

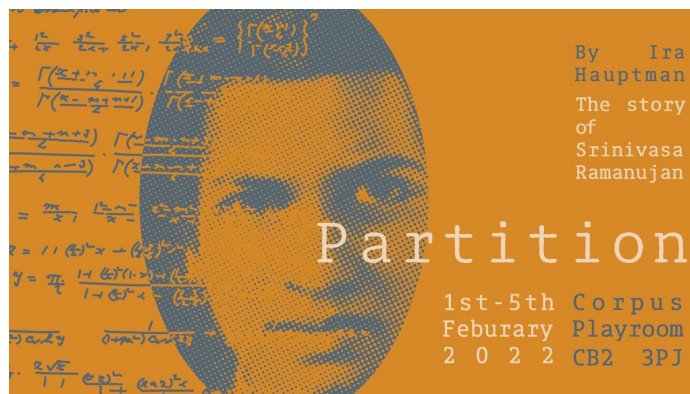
---

## Partition by Ira Hauptman

1-5 February, 7pm, Corpus Playroom

*"I have to form myself, and to try to help you to form, some sort of reasoned estimate of the most romantic figure in the recent history of mathematics."*

- G. H. Hardy on S. Ramanujan, 1936



In 1913, a young, self-taught mathematical genius in India named Srinivasa Ramanujan is invited to Cambridge to work with G. H. Hardy, a professor at Trinity college and established mathematician. Over the next five years, they worked together to produce hundreds of important results, and Ramanujan is today heralded as the greatest Indian mathematician of all time. However, their partnership is threatened by Ramanujan's failing health as well as the two men's vastly different cultural and religious backgrounds. At the same time, shadows of the first world war looms over the world. **Partition** is a deftly imagined, multileveled drama on faith, mathematics and a tentative friendship between two of the greatest minds in scientific history.

Book tickets [here](#).

---