AustMS-WIMSIG Early Career Workshop 2024

Monday, 30 September 2024

Lecture Theatre 024, New Law Building Annex (F10A), The University of Sydney

Venue Map

The workshop will be held in Lecture Theatre 024, New Law Building Annex (F10A). Access to the New Law Building Annex is via Eastern Avenue (main entrance) or Barff Road. When inside, proceed via stairs or lift to Level 0 and follow the signs to Lecture Theatre 024.



What to Bring

Please bring a pen and paper for the activities. A laptop or tablet will also be useful.

Wi-Fi

Eduroam will be available for use at the Workshop.

Acknowledgement of Country

We acknowledge the Gadigal people as Traditional Owners of the Sydney region, their Elders past and present, and their continued connection with their land, waterways and community.



Code of Conduct

The WIMSIG Conference Code of Conduct applies to this event.

Sponsors



Program

Time	Facilitator(s) and Session Title
9:00-9:15	Arrival and Welcome
9:15-10:00	Grace Garden, Sophie Raynor, Alex Tam Speed networking
10:00-10:45	Morning Tea
10:45-12:00	Zsuzsanna Dancso All about landing a job
12:00-13:15	Lunch
13:15-14:30	Michael Dallaston and Adrianne Jenner Academic communication for different audiences
14:30-15:15	Afternoon Tea
15:15-16:30	Asha Rao Balancing research/teaching/administration/engagement/life
	Close

Sessions

All about landing a job

How do you choose which positions to apply for? How do you make your application stand out, so you're invited for an interview? How do you ace your interviews? How are post-doctoral applications different from continuing/tenure track applications? What are the application timelines? How do the application and hiring processes differ in different countries? What about your partner/ children/ cats/ baby grand piano?

As someone who has applied for hundreds of post-doc and continuing positions on three continents, was hired for enough of them to thrive, and has by now sat on a number of hiring committees, I will share with you what I know about how to succeed throughout this exciting but often nerve wracking process. Bring your questions, any experiences you're happy to share, and get ready for lists of executable steps!

Academic communication for different audiences

Maths is hard, and telling other people about maths is also hard, at least, if you want them to get anything out of it. In this session we will discuss communication in two different contexts:

- How to discuss your research for a general audience, *e.g.* for networking, funding applications, or at family barbeques.
- General ideas and common pitfalls for research (e.g. conference) presentations.

Balancing research/teaching/administration/engagement/life

In the workshop we will discuss some of the many things that stymie us when we are up and coming academics. I will share the strategies I have used and the twists and turns my own career has taken, and what I have done to bring the Discipline of Mathematics at RMIT to gender neutrality. Some of the things we will address include:

- 1. Write research goals and strategies?
- 2. Balance your desire to do your best for students with trying to establish your career?
- 3. What sort of trajectories do academic career take?
- 4. Preserving your mental health with everything going on around you.
- 5. Please think of what else you would like to hear about and let me know so I can touch on those as well.

Facilitators



Zsuzsanna Dancso

Zsuzsanna Dancso is an associate professor of mathematics at the University of Sydney. Her research interests are in quantum topology and knot theory: she enjoys topological problems that are secretly about algebra, and vice versa. She maintains a not-so-secret side hustle in combinatorics, and has been known to talk about matroids in a public lecture. Zsuzsanna has taught abstract linear algebra to many Sydney undergraduate students, and loves supervising research projects at all levels.

Zsuzsanna was born and raised in Hungary, and attended the Eotvos University in Budapest as an undergraduate student in pure mathematics. She moved overseas to the US and Canada to pursue a PhD. Since her partner at the time was moving between postdoc jobs, Zsuzsanna completed her PhD at three universities: the University of Washington, Rutgers University, and the University of Toronto. She then worked in post-doctoral positions at the Institute for Advanced Study (Princeton), the Fields Institute (Toronto), the Mathematical Sciences Research Institute (now SLMath, Berkeley), and the Australian National University (Canberra), before joining the University of Sydney as a Senior Lecturer and DECRA Fellow in 2017. Along the way she had a post-doc baby, who came along to her job interview at Sydney when he was 12 weeks old.

When Zsuzsanna was growing up, she never imagined living in Australia (or, in fact, more than a kilometre from her parents' house), but the experience has grown on her.

Adrianne Jenner



Dr Adrianne Jenner is a Senior Lecturer in the School of Mathematical Sciences at Queensland University of Technology (QUT). Her research is in the field of mathematical biology, particularly focused on cancer, viruses and the immune system. She uses a range of techniques including deterministic modelling and agent-based modelling the capture the dynamics of these diseases.



Michael Dallaston

Michael completed his PhD in applied mathematics at QUT in 2013. After postdoctoral positions at the University of Oxford and Imperial College London, and a Lecturer position at Coventry University in the UK, he returned to QUT in 2019, where he is now a Senior Lecturer. Michael's research interests comprise analytical and computational PDE methods, particularly in the context of fluid dynamics. He has occasionally been known to apply some of these skills in other areas, such as mathematical biology and curvature flows.

Asha Rao



Professor Asha Rao is a Professor of mathematics at RMIT University. She conducts research in cyber-mathematics with the aim of better securing cyberspace. Her research ranges from designing better codes for communication, to detecting money laundering and describing human interactions in the physical and cyber spaces. Her research has led to traditional outputs such as grants and publications, and non-traditional outputs such as an art installation, invitations to closed and open meetings on cybersecurity as well as to observe the United Nations intergovernmental meetings on cybercrime.

Professor Rao started her academic career as a casual tutor at RMIT in 1992, rising through the ranks to become professor. She has undertaken leadership roles within RMIT and outside. She was Associate Dean of Mathematical Sciences at RMIT from 2017–2023. In 2020, she simultaneously became the first female Director (Interim) of the Australian Mathematical Sciences Institute (AMSI), a joint venture of 14 Australian universities, and the peak body advocating for mathematics in Australia.

Asha is passionate about mathematics and gender issues that stymie the progress of women and girls in STEM careers. She is often on live television speaking about cybersecurity issues, and actively participates in community activities such as Pint of Science to promote mathematics and cyber safety. She has been recognised within RMIT and nationally for her work in mathematics, cybersecurity and gender equity. She is a 2019-2020 Science & Technology Australia Superstar of STEM, a 2021 Inductee into the Victorian Honour Roll of Women in the Trail Blazer category, and winner of the 2021 India Australia Science and Technology Development award.