



# News

## General News

### Special Issue of JAustMS dedicated to the late Jonathan M. Borwein

The *Journal of the Australian Mathematical Society* plans to publish a special issue dedicated to the late Jonathan M. Borwein in recognition of his profound and wide ranging contributions to mathematics and especially his numerous contributions to the mathematical sciences in Australia over the last eight years.

The guest editorial board for the issue is:

- David Bailey,
- Regina Burachik,
- Tony Guttman,
- Brailey Sims (Chair).

Papers should be submitted via the normal channel for the Journal (details at: <https://www.cambridge.org/core/journals/journal-of-the-australian-mathematical-society#>), include an appropriate dedication, and the cover letter should clearly indicate it is intended for the Jonathan M. Borwein special issue. All submissions will be vetted through the normal peer review process.

The deadline for submissions is 30 November 2017, with the expectation that the special issue will appear in late 2018.

### Monash University

‘Women of Mathematics Throughout Europe — A Gallery of Portraits’, a poster exhibition, is on display from April to June in the foyer of 9 Rainforest Walk at the Clayton campus.

---

## Completed PhDs

### Queensland University of Technology

- Dr Xing Ju Lee, *Statistical and simulation modelling for enhanced understanding of hospital pathogen and related health issues*, supervisor: Tony Pettitt.
- Dr Jannah Baker, *Bayesian spatiotemporal modelling of chronic disease outcomes*, supervisor: Kerrie Mengersen.

### Swinburne University of Technology

- Dr Zhenzhen Chen, *Dynamics of mathematical models for bioreactor*, supervisors: Tonghua Zhang, Moses Tadé, and Geoffrey Brooks.

### University of Adelaide

- Dr Dinesha Ranathunga, *Auto-configuration of Critical Network Infrastructure*, supervisor: Matthew Roughan.

### University of Sydney

- Dr Ross Ogilvie, *Deformations of harmonic tori in  $S^3$* , supervisor: Emma Carberry.
- Dr Louis Bhim, *Polynomial bounds for solutions to boundary value and obstacle problems with applications to financial derivative pricing*, supervisor: Ray Kawai.

---

## Awards and other achievements

### Australian National University

- Professor Markus Hegland has been awarded the title of Technical University of Munich (TUM) Ambassador 2016. Every year the TUM honours a group of selected international top-level scientists and Research Alumni with the title of ‘TUM Ambassadors’ in recognition of their services, acknowledging them as representatives of all the TUM Research Alumni in the world. To find out more about Markus’ collaboration with TUM and the other 2016 TUM Ambassadors, visit the TUM website <https://www.together.tum.de/alumni/forscher-alumni/ambassadors/tum-ambassadors-2016/>.

### Monash University

- Congratulations to Dr Todd Oliynyk, Associate Professor in the School of Mathematical Sciences, who has been awarded a 2017 Fulbright Senior Scholarship. Under the terms of the scholarship Dr Oliynyk will work with leading researchers at Princeton University to develop a rigorous mathematical foundation for gravitating relativistic material bodies that is applicable to astrophysical systems. He will also visit the University of Michigan and Johns Hopkins University to collaborate with researchers on aspects of his project.

### Murdoch University

- Dr Nicola Armstrong was awarded a France-Australia Science Innovation Collaboration Fellowship (2016–2017) from the Australian Academy of Science for the project, ‘Transdisciplinary approaches to understanding the development of dementia and its risk factors’.

### University of Sydney

- Alexander Kersch and Joel Gibson were accepted to the MSRI’s 2017 Summer Graduate School on Soergel Bimodules.

- Dr Pengyi Yang won the 2017 J G Russell Award from the Australian Academy of Science.
- Eric Hester jointly won the T.M. Cherry Prize for the best student talk at the ANZIAM 2017 Conference in Hahndorf, South Australia.
- Elynor Liu who was given an honourable mention for her talk at ANZAMP.

### **Western Sydney University**

- Professor Andrew Francis has, together with Professor Vincent Moulton of the University of East Anglia, won a Royal Society International Exchanges Award, for their project, ‘Combinatorics and geometry of phylogenetic network spaces’, 2017–2018.

---

## **Appointments, departures and promotions**

### **Australian National University**

- Zsuzsanna Dancso departed on 21 April 2017.
- Timothy Trudgian departed on 31 May 2017.

### **Deakin University**

- Professor Maia Angelova (Maia Angelova Turkedjieva) was appointed Professor of Data Analytics and Machine Learning in the School of Information Technology from January 2017. Her research interests lie in biomathematics and mathematical physics with applications to biomedicine and health using delay differential equations in biology, physiology and medicine, time series analysis of physiological signals, and development of group-theoretical and algebraic methods for condensed matter systems, wavelet and artificial neural network models of optical and wireless communications systems. She received her PhD from the University of Sofia, her thesis being titled ‘On the method of irreducible tensorial sets for systems with magnetic symmetry and its application to the crystal field theory’. Since obtaining her degree, she has worked as Assistant Professor at the Faculty of Physics, University of Sofia, Lecturer in Physics in Somerville College, University of Oxford and joined the Department of Mathematics at Northumbria University, in the United Kingdom in 1997 where she became a Professor in 2004.

### **Monash University**

#### *New lecturers:*

- A/Prof Yan Dolinsky and Dr Ivan Guo.

#### *New postdocs:*

- Peter Grossman
- Mehmet Ozmen

*Departures:*

- Pascal Buenzli
- Joel Miller
- Jennifer Flegg

**Queensland University of Technology**

- Dr Pascal Buenzli has commenced as a Lecturer in Applied Mathematics.

**Swinburne University**

- Dr Louise Olsen-Kettle started at Swinburne in March 2017, as a Women in STEM Fellow in Applied Mathematics.
- Professor Derek Chan joined the department in August 2016.

**University of New England**

- Dr Weiwei Ding will be leaving UNE at the end of April 2017 to take up a JSPS postdoctoral fellowship at the University of Tokyo. He has been working at UNE as a postdoctoral fellow on free boundary problems with Professor Yihong Du since 2015.

**University of New South Wales Canberra**

- Timothy Trudgian has joined, as a Senior Lecturer and ARC Future Fellow.

**University of Sydney**

- Dr Milena Radnovic will be appointed to an ongoing position on 1 July 2017.

**University of Wollongong**

- Dr Pauline O'Shaughnessy has been appointed as a Lecturer in Statistics.

---

**New Books****Swinburne University of Technology**

Todd, B.D. and Daivis, P.D. (2017). *Nonequilibrium Molecular Dynamics: Theory, Algorithms and Applications*. Cambridge University Press.

**University of Adelaide**

Balasuriya, S. (2017). *Barriers and Transport in Unsteady Flows: A Melnikov Approach*. SIAM, Philadelphia, PA, <http://bookstore.siam.org/mm21/>.

### University of Adelaide and University of Wollongong

Baowan, D., Cox, B.J., Hilder, T.A., Hill, J. M. and Thamwattana N. (2017). *Modelling and Mechanics of Carbon-based Nanostructured Materials*. William Andrew, ISBN-10: 0128124636, ISBN-13: 978-0128124635.

### Western Sydney University

Hazrat, R. (2016). *Graded Rings and Graded Grothendieck Groups*. (London Math. Soci. Lecture Note Series **435**), Cambridge University Press.

Hazrat, R. (2016). *Mathematica<sup>®</sup>, a Problem-centered Approach*, 2nd edn. Springer, London, UK.

## Conferences and Courses

Conferences and courses are listed in order of the first day.

### ACEMS Workshop on Multi-variable Polynomials and Stochastic Systems

Date: Friday 2 June 2017

Venue: Riverview Room, Emmanuel College, The University of Queensland

Web: <https://www.eventbrite.com/o/arc-centre-of-excellence-for-mathematical-amp-statistical-frontiers-11052983050>

This one-day workshop will concentrate on multi-variable polynomials and high dimensional stochastic systems, as well as the connection between these areas. The third such ACEMS meeting, it will feature keynote talks by Ole Warnaar and Mark Holmes. Topics will include lattice models, interacting particle systems, percolation, random walks, random graphs and trees, urn models, multi-type population models, and KPZ universality.

Registration is free. Lunch will be provided. You will be contacted in the week prior to the event to confirm your attendance for catering purposes.

### Tensor Categories and Field Theory

Date: 5–9 June 2017

Venue: University of Melbourne

Web: <https://sites.google.com/view/tensorcategories2017/home>

This event will involve introductory lectures and research talks from high profile international visitors including

- Bianca Dittrich (Perimeter Institute)
- Shashank Kanade (University of Alberta), ‘Vertex tensor categories I: fundamental constructions’, ‘Vertex tensor categories II: algebra objects and conformal embeddings’
- Liang Kong (University of New Hampshire)

- Dmitri Nikshych (University of New Hampshire), ‘Braided fusion categories I: basic theory and structure results’, ‘Braided fusion categories II: anisotropy and Witt equivalence’
- Eric Rowell (Texas A&M University), ‘Modular categories: constructions, conjectures and classification’, ‘Super-modular categories: fermionic quotients, congruence kernels and the 16-fold way’
- Simon Wood (Cardiff University), ‘Fusion by hand: the NGK algorithm’.

We would also like to invite registered participants to now submit titles and abstracts for contributed talks in areas related to the workshop’s themes. We expect that these will be 25 minutes (plus 5 minutes for questions) in duration (depending on demand). Please email your title/abstract directly to David Ridout ([david.ridout@unimelb.edu.au](mailto:david.ridout@unimelb.edu.au)) before 5 pm 26 May.

We are required to charge a small registration fee which we have fixed at

- \$25 for students
- \$50 for AustMS members and speakers
- \$75 for everyone else.

### **MATRIX: Computational Inverse Problems**

Dates: 11–23 June 2017

Venue: University of Melbourne, Water Street, Creswick, Victoria

Web: <http://www.matrix-inst.org.au/events/computational-inverse-problems/>

On behalf of the program organisers, MATRIX is delighted to be hosting a three-day conference on Computational Inverse Problems.

Organised by Tiangang Cui (Monash), Hans De Sterck (Monash), Markus Hegland (ANU), Youssef Marzouk (MIT), Ian Turner (QUT), and Karen Willcox (MIT); conference topics will include:

- deterministic and statistical inverse problems,
- Bayesian analysis,
- computational statistics (e.g. Markov chain Monte Carlo, sequential Monte Carlo),
- high-dimensional,
- approximation techniques (e.g. quasi Monte Carlo and sparse grids),
- algorithms for big data analytics,
- stochastic and distributed optimisation methods, model reduction,
- high performance computing scientific and industrial applications such as computational finance mathematical biology; and
- geophysics and flows in porous media.

Invited and contributed presentations will be scheduled each day during the conference.

The program organisers wish to highlight that a number of travel awards for female participants are also currently available.

The conference is followed by a one-week intensive research workshop on Computational Inverse Problems 19–23 June. There are a few places left for this research workshop. If you are interested in attending this, please email Tiangang Cui ([Tiangang.Cui@monash.edu](mailto:Tiangang.Cui@monash.edu)).

For information on confirmed invited participants and registration, please visit the website.

### **Symposium on Stylus Enabled and Cloudbased Tertiary Learning and Teaching in STEM Courses**

Date: Monday 19 June 2017

Venue: RMIT University (Building 80, level 4, rooms 6, 20, 22, 24 and 25)

This is a full day symposium, in collaboration and with sponsorship from Microsoft Australia. We invite teaching faculty to submit abstracts to support an oral presentation that focuses on evidence based best practices of how pen-enabled devices and cloud technologies can provide a means to drive student engagement, improve learning outcomes, and retention. Today, the potential for technology to act as a major catalyst for educational change has never been more apparent. Educators are utilising technology to facilitate meaningful learning tasks that engage students collaboratively, while institutions are shifting towards using cloud based computing and decentralised information technology services to transform the campus experience.

In the morning session the symposium will cover:

- research into technology’s impact on teaching and learning, with two keynote presentations on the use of the digital stylus, as opposed to pen and paper, to drive student engagement and impact
- best practices from other Tertiary Educators and thought leaders on Digital transformation
- provide an opportunity for academics to present their experiences. In the afternoon session the symposium will focus on
  - experiencing the latest devices and supporting teaching and learning resources
  - Learning from others in workshops designed for lecturers to transform their teaching to engage 21st century learners

Oral presentations for the morning session: please submit abstracts to Dr Sylvia Urban ([sylvia.urban@rmit.edu.au](mailto:sylvia.urban@rmit.edu.au)).

Abstracts must be no more than 500 words and be submitted as a word document

#### *Symposium details*

- Registration for full day Symposium is \$50.00 (ex GST)
- Morning and afternoon tea as well as lunch included in cost
- Last day to register is 13 June 2017.

**AMSI Optimise**

Dates: 26–30 June 2017

Venue: Melbourne

Web: <http://optimise.amsi.org.au/>

For further information, please see the website. Registrations close on 16 June 2017.

**AMSI Winter School 2017: Computational Foundations of Data Science**

Dates: 26 June to 7 July 2017

Venue: Queensland University of Technology

Web: <http://ws.amsi.org.au/>

For further details, see the website, or Gazette 44, no. 1, p. 44.

**Mathematics-in-Industry for New Zealand 2017**

Date: 26–30 June 2017

Venue: Massey University, Palmerston North, New Zealand

Web: <http://www.minz.org.nz>

For further details, see the website.

**MATRIX: Integrability in Low-Dimensional Quantum Systems**

Dates: 26 June to 21 July 2017

Venue: University of Melbourne, Water Street, Creswick, Victoria

Web: <http://www.matrix-inst.org.au/events/integrability-in-low-dimensional-quantum-systems/>

Registration is by invitation only. For further details, please see the website.

**CATS2017: Computational & Algorithmic Topology**

Dates: Tuesday 27 June to Saturday 1 July 2017

Venue: Sydney

Web: <http://www.maths.usyd.edu.au/u/tillmann/cats2017/>

This interdisciplinary workshop consists of three days of introductory lectures and contributed talks followed by two days of invited research talks.

*Introductory lectures:*

- Serge Gaspers (UNSW), ‘Parameterised complexity’
- Vanessa Robins (ANU), ‘Discrete Morse theory’
- Hyam Rubinstein (Melbourne), ‘Sweep-outs’
- Monique Teillaud (INRIA Nancy), ‘Delaunay triangulations’
- Abby Thompson (UC Davis), ‘Thin position’

*Research talks*

- Erin Chambers (Saint Louis University)
- Murray Elder (The University of Newcastle)



- Joel Hass (UC Davis)
- Rob Kirby (UC Berkeley)
- Dave Letscher (Saint Louis University)
- Clément Maria (The University of Queensland)
- Jessica Purcell (Monash University)
- Hyam Rubinstein (The University of Melbourne)
- Hubert Wagner (IST Austria)
- Yusu Wang (The Ohio State University)

In addition, participants are given the opportunity to submit contributed talks.

Please consult the conference website for more information.

### **MERGA 40**

Dates: 2–6 July 2017

Venue: Monash University, Clayton

Web: <http://tiny.cc/merga40>

For further details, please see the website, or Gazette 44, no. 1, p. 14.

### **2017 Winter School in Mathematical & Computational Biology**

Date: 3–7 July 2017

Venue: Institute for Molecular Science, The University of Queensland

Web: <http://bioinformatics.org.au/ws17/>

A premier bioinformatics training event in Australia, the series of winter schools is designed to introduce bioinformatics, mathematical and computational biology to advanced undergraduate and postgraduate students, postdoctoral researchers and others working in the fields of biology, mathematics, statistics, computer science, information technology, complex systems analysis, and chemical and medical sciences and engineering.

Themes of the fourteenth annual Winter School

- Next generation sequencing and bioinformatics
- Advances in single-cell sequencing analysis
- Modelling ecologies and populations
- Advanced data visualisation and computation
- Systems and synthetic biology

#### *Featured speakers*

- John Quackenbush, Harvard University
- Christine Wells, The University of Melbourne
- Helena Kilpinen, University College London
- David Edwards, University of Western Australia
- Nicole Cloonan, University of Auckland
- Eric Trembl, The University of Melbourne
- Marcel Dinger, Garvan Institute of Medical Research

Speakers at Winter School are chosen as great presenters and world leaders in their field. For the complete list of speakers and presentation titles, visit website.

#### *Workshop and bootcamp*

A Genomics Virtual Laboratory training workshop (limited places) will be run during the Winter School on Wednesday 5 July. A Software Carpentry Bootcamp (10–11 July) is also being run in conjunction with the Winter School. Both events were fully subscribed in days last year, so register early to avoid disappointment.

#### *Key dates*

- Online registration: from now until 25 June 2017
- Early bird: from now until Sunday 18 June 2017
- Normal: 19–25 June 2017

Student travel scholarship: applications close on 31 May 2017

### **The International Conference on Robust Statistics**

Dates: 3–7 July 2017

Venue: University of Wollongong

Web: <http://niasra.uow.edu.au/icors2017/index.html>

For further details, see the website or Gazette 44, no. 1, p. 61.

### **Harmonic Analysis and PDE**

Dates: 17–21 July 2017

Venue: Macquarie University

Web: <http://www.mq.edu.au/about/about-the-university/faculties-and-departments/faculty-of-science-and-engineering/departments-and-centres/departments-of-mathematics/news-and-events/2017-harmonic-analysis-and-pde-workshop>

This workshop is organised on the occasion of Professor Xuan Duong turning 60 in 2017. For more information, please view the webpage or Gazette 44, no. 1, pp. 61–62.

### **28th International Workshop on Combinatorial Algorithms**

Dates: 17–21 July 2017

Venue: Newcastle

Web: <https://carma.newcastle.edu.au/meetings/iwoqa/>

This is a very special IWOQA, dedicated to the memory of Professor Mirka Miller. For further details, please see the website.

### **12th International Conference on Fixed Point Theory and its Applications**

Dates: 24–28 July 2017

Venue: Harbourview Function Centre, Newcastle

Web: <https://carma.newcastle.edu.au/meetings/icfpta/>

The conference celebrates William A. (Art) Kirk's 80th and Brailey Sims' 70th birthdays and is dedicated to the memory of Jonathan M. Borwein in recognition of his many contributions to nonlinear analysis.

ICFPTA2017 is a major international conference that brings together leading experts and researchers from around the world to focus on new developments, applications, ideas and methods in this important and dynamic field. Fixed point theory, beside its own intrinsic mathematical interest, is instrumental for other areas of mathematics as diverse as integro-differential equations and higher order logic, and has significant applications in economics, engineering and throughout the behavioural, information, life, physical and social sciences.

Keynote speakers include

- Tomas Dominguez Benavides, University of Seville (Spain)
- Christopher Lennard, University of Pittsburgh (USA)
- Stanislaw Prus, Maria Curie-Skłodowska University (Poland)
- Hong-Kun Xu, Hangzhou Dianzi University (P. R. China)

Nonlinear analysis is a growing area of interest in Australia and participation in the conference should be of special value to researchers, and in particular higher degree students, working in this area or any of its many areas of application.

Further information is available at the website.

### **WIMSIG Conference 2017: Celebration of Women in Australian Mathematical Sciences**

Dates: 24–26 September 2017

Venue: University of South Australia, Adelaide

Web: [www.austms.org.au/WIMSIG-conference-2017](http://www.austms.org.au/WIMSIG-conference-2017)

The Women in Mathematics group of the Australian Mathematical Society is organizing Australia's first research conference showcasing the research of women in the mathematical sciences. The conference welcomes people of any gender. All the research talks will be given by women. 'Mathematical sciences' will be broadly interpreted to include pure mathematics, applied mathematics, mathematical statistics, applied statistics, biostatistics, bioinformatics, mathematical biology, mathematical physics, mathematics in industry, etc.

Confirmed plenary speakers

- Professor Kerrie Mengersen (QUT)
- Dr Christine O'Keefe (CSIRO)
- Professor Malabika Pramanik (University of British Columbia, Canada)
- Professor Ami Radunskaya (Pomona College, USA, and President of the US Association for Women in Mathematics (AWM)).

We are planning special sessions, plenary speakers, a poster session, a conference dinner, a panel on gender equity in the mathematical sciences and beyond, and a professional development workshop. Childcare will be available. We hope to offer some travel support, primarily for students and early-career researchers. Both

female researchers and senior leaders (of any gender) in our discipline will find it eye-opening and inspiring to be in a majority-female research environment, even for a few days.

If you're considering participating or would just like to be kept informed, please take a moment to fill out the brief Expression of Interest form on the conference website, where registration will open soon.

We warmly invite you to join us for this unique and exciting conference, which offers opportunities to hear Australia's upcoming female mathematicians present their research, to build and extend research collaborations, to develop one's professional skills, to consider how gender affects the development of mathematical careers, and to network with women in the Australian mathematical sciences.

### **Jonathan M. Borwein Commemorative Conference**

Dates: 25–29 September 2017

Venue: Noah's On The Beach, Newcastle, NSW

Web: <https://carma.newcastle.edu.au/meetings/jbcc/>

This conference will be devoted to five areas to which Jonathan Borwein made an outstanding contribution:

- Applied Analysis, Optimisation and Convex Functions (chairs: Regina Burachik and Guoyin Li)
- Education (chairs: Judy-anne Osborn and Naomi Borwein)
- Experimental Mathematics and Visualisation (chair: David Bailey)
- Financial Mathematics (chair: Qiji (Jim) Zhu)
- Number Theory, Special Functions and Pi (chair: Richard Brent)

### **Number Theory Down Under**

Dates: 29 September to 2 October 2017

Venue: La Trobe University, Bendigo

Web: <https://ntdu.mathsig.org/ntdu5/>

This year, again, the general focus of the workshop will be on open problems in number theory; any area of number theory is a fair game, as are connections to other fields of mathematics.

The registration link is active on the conference website and we highly recommend you to register as soon as possible. There are a few slots available for those who would like to give a talk. Please send your EOI to the conference organisers.

Bendigo is Victoria's fourth largest city and is a vibrant contemporary regional centre. The city has a rich and prosperous heritage dating back to the days when gold was discovered in the area in the 1850s, leaving a legacy of stunning Victorian architecture and manicured gardens. Modern-day visitors to Bendigo can sample the stunning contemporary cuisine in historic buildings, admire modern art and feature exhibitions in venues new and old, and explore the city's fascinating history at museums, gardens and galleries.

*Sponsorship*

The conference is mainly supported by La Trobe University. AMSI allocates a travel allowance annually to each of its member universities (for a list of members, see <http://amsi.org.au/membership/members/>). Students or early career researchers from AMSI member universities without access to a suitable research grant or other sources of funding may apply to the Head of their respective departments for a subsidy of travel and accommodation out of the departmental travel allowance.

**MATRIX: Elliptic Partial Differential Equations of Second Order: celebrating 40 years of Gilbarg and Trudinger's book**

Dates: 16–28 October 2017

Venue: University of Melbourne, Water Street, Creswick, Victoria

Web: <http://www.matrix-inst.org.au/events/elliptic-differential-equations-of-second-order/>

Registration is by invitation only. For further details, please see the website.

**MATRIX: Combinatorics, Statistical Mechanics, and Conformal Field Theory**

Dates: 29 October to 18 November 2017

Venue: University of Melbourne, Water Street, Creswick, Victoria

Web: <http://www.matrix-inst.org.au/events/combinatorics-statistical-mechanics-and-conformal-field-theory/>

Registration is by invitation only. For further details, please see the website.

**MATRIX: Mathematics of Risk**

Date: 20 November to 8 December 2017

Venue: University of Melbourne, Water Street, Creswick, Victoria

Web: <http://www.matrix-inst.org.au/events/mathematics-of-risk/>

Registration is by invitation only. For further details, please see the website.

Incorporating workshop on mathematical modelling of risk and contiguous topics.

Date: 27 November to 1 December 2017

Venue: as above.

**Tutte Centenary Retreat**

Dates: 26 November to 2 December 2017

Venue: University of Melbourne, Water Street, Creswick, Victoria

Web: <http://www.matrix-inst.org.au/events/tutte-centenary-retreat/>

Registration is by invitation only. For further details, please see the website.

### **Engineering Mathematics and Applications (EMAC) Conference**

Dates: 29 November to 1 December 2017

Venue: University of Auckland, City Campus, Auckland, New Zealand

Web: [www.emac2017.com](http://www.emac2017.com)

EMAC is the biennial meeting of the Engineering Mathematics Group (EMG), a special interest group of ANZIAM. This meeting provides a forum for researchers interested in the development and use of mathematical methods in engineering and applied mathematics. It aims to foster interactions between mathematicians and engineers, from both academia and industry and will also include a special session on engineering/mathematics education. The invited speakers are: Michael Forbes, Philippa Martin, Caroline Yoon, Graham Weir, Louise Olsen-Kettle.

The ANZIAM Student Support Scheme will be available to student attendees of EMAC. Applications close on 15 October 2017

Other key dates:

Abstract submissions close: 15 September 2017

Early-bird registrations close: 15 October 2017

### **5th International Combinatorics Conference (5ICC)**

Dates: 4–9 December 2017

Venue: Monash University, Clayton campus

Web: <http://www.monash.edu/5icc/>

5ICC is the fifth in a series of major combinatorics conferences that are run once per decade by the Combinatorial Mathematics Society of Australasia. Researchers in any area of combinatorics (interpreted broadly) are warmly invited. Students are also encouraged to attend, and there will be a prize for the best student talk.

Plenary Speakers:

- Bill Chen, Nankai University
- Maria Chudnovsky, Princeton University
- Charlie Colbourn, Arizona State University
- Marston Conder, University of Auckland
- David Eppstein, University of California, Irvine
- Joanna Fawcett, Cambridge University
- Jacob Fox, Stanford University
- Daniela Kühn, Birmingham University
- Barbara Maenhaut, University of Queensland
- Brendan McKay, Australian National University
- Alexander Scott, Oxford University
- Paul Seymour, Princeton University
- Le Anh Vinh, Vietnam National University

In the week prior to 5ICC, the Tutte Centenary Retreat will be held at The Mathematical Research Institute MATRIX to celebrate 100 years since the birth of Bill Tutte.

**AustMS 2017: 61st Annual Meeting**

Dates: 12–15 December 2017

Venue: Macquarie University

Web: <http://www.austms.org.au/tiki-calendar.php?calitemId=727>

## International invited speakers

- Georgia Benkart (University of Wisconsin–Madison, USA), ‘Representation theory and Lie algebras’
- Young-Ju Choie (Pohang University of Science and Technology, South Korea), ‘Automorphic forms, automorphic representations, number theory’
- Ivan Corwin (Columbia University, USA), ‘Integrable probability’
- Hélène Frankowska (Université Pierre et Marie Curie, Paris 6, France), ‘Non-linear control, viability theory, set-valued analysis’
- Steve Hofmann (University of Missouri, USA), ‘Harmonic analysis’
- Andrei Okounkov (Columbia University, USA), ‘Representation theory’
- Maryna Viazovska (Humboldt University of Berlin, Germany), ‘Number theory, discrete geometry’

## National Invited Speakers

- Yihong Du (University of New England), ‘Non-linear PDEs’
- Catherine Greenhill (University of New South Wales), ‘Graph theory, random algorithms’
- Phil Pollet (University of Queensland), ‘Applied probability’
- Michael Small (University of Western Australia), ‘Complex systems’
- Hans De Sterck (Monash University), ‘Computational mathematics’

**MATRIX: Geometric R-matrices**

Dates: 17–22 December 2017

Venue: University of Melbourne, Water Street, Creswick, Victoria

Web: <http://www.matrix-inst.org.au/events/geometric-r-matrices/>

Registration is by invitation only. For further details, please see the website.

**MATRIX: Non-equilibrium Systems and Special Functions**

Dates: 7 January to 2 February 2018

Venue: University of Melbourne, Water Street, Creswick, Victoria

Web: <http://www.matrix-inst.org.au/events/non-equilibrium-systems-and-special-functions/>

Registration is by invitation only. For further details, please see the website.

**MATRIX: Month of Mathematical Biology**

Dates: 27 June to 20 July 2018

Venue: University of Melbourne, Water Street, Creswick, Victoria

Web: <http://www.matrix-inst.org.au/events/month-of-mathematical-biology/>

Registration is by invitation only. For further details, please see the website.

### Visiting mathematicians

Visitors are listed in alphabetical order and details of each visitor are presented in the following format: name of visitor; home institution; dates of visit; principal field of interest; principal host institution; contact for enquiries.

- Dr Udo Baumgartner; DHBW Lorrach; 15 August to 20 September 2017; pure; USN; Jacqui Ramagge
- Mr James Booth; Cornell University; 13 February to 31 May 2017; ANU; Alan Welsh
- A/Prof Ruth Corran; The American University of France; 18 January to 30 June 2017; pure; USN; David Easdown
- Dr A.E.L. Davis; University College London; 1 January to 31 December 2017; ANU; Lilia Ferrario
- Ms Li Deng; Central Southern University, China; 21 November 2016 to 20 November 2018; CUT
- Mr Yongyi Gu; Guangzhou University, China; 25 October 2016 to 31 October 2017; CUT
- Prof Kristen Hawkes; University of Utah; 28 May to 1 July 2017; applied; USN; Peter Sehoon Kim
- Prof Jun Hu; Beijing Institute of Technology; 28 July to 18 August 2017; pure; USN; Andrew Mathas
- Ctirad Klimcik; Institut de Mathematiques de Marseille; 17 February to 14 May 2017; ANU; Peter Bouwknecht
- Slawomir Klimek; Indiana/Purdue University Indianapolis; 6 April to 6 May 2017; ANU; Andrew Hassell
- John Knight; University of Sydney; 20 April to 18 October 2017; ANU; Steve Roberts
- Prof Nicolas Libedinsky; University of Chile; 15 September to 15 November 2017; pure; USN; Geordie Williamson
- Dr Xia Liu; Henan Normal University, China; 1 September 2016 to 31 August 2017; SUT; applied mathematics, dynamical systems; Tonghua Zhang
- Dr Yong Liu; Wuhan University of Science and Technology; June 2016 to June 2017; CUT; applied finance and economics; Ph: 92663534
- Prof Elisabetta Maluta; Politecnico di Milano; 30 July to 5 August 2017; functional analysis; FedUni; David Yost
- Timothy Marchant; University of Wollongong; 22–29 May 2017; theory of nonlinear phenomena; USQ; Yury Stepanyants
- A/Prof Ricardo Parreira da Silva; University of Brasil; 1 April 2017 to 31 March 2018; pure; USN; Daniel Daners
- Prof Dmitry Pelinovsky; McMaster University; 1 January to 30 June 2018; applied; USN; Nalini Joshi
- Dirk Pfluger; University of Stuttgart; 10 April to 1 May 2017; ANU; Markus Hegland
- Raymond Preusser; Univ. Brasilia; October to November 2017; path algebras; WSU; Roozbeh Hazrat
- Mr James Reoch; Adelaide; 3 August 2015 to 31 December 2017; applied; USN; Peter Sehoon Kim



Eric Rowell; Texas A&M University; 29 May to 9 June 2017; ANU; Scott Morrison  
A/Prof Ege Rubak; Aalborg University, Denmark; 29 November 2016 to 30 May  
2017; CUT

Prof Mariel Saez; PUC Santiago (Chile); 15 October to 15 December; geometric  
analysis; Monash; Julie Clutterbuck

A/Prof Sarith Sathian; Indian Institute of Technology, Madras; May to August  
2017; a molecular dynamics study of thermo-molecular orientation in highly  
confined nanofluidic systems; SUT; Billy Todd

Dr Behrouz Taji; Northwestern; 1 March to 31 May 2017; pure; USN; Stephan  
Tillmann

Mr Dingshi Tian; Xiamen University; 25 February to 25 May 2017; statistics; USN;  
Qiyang Wang

Ms Pei Wang; Central South University, China; July 2016 to June 2018; CUT;  
stochastic optimisation; Ph: 92663534

A/Prof Zhian Wang; Hong Kong Polytechnic University; 1–9 August 2017; ap-  
plied; USN; Peter Sehoon Kim

Dr Simon Wood; 20 August 2016 to 31 December 2017; ANU; Peter Bouwknecht

Dr Ying Xu; Hefei University of Technology; 1 September 2015 to 31 August 2017;  
pure; USN; Ruibin Zhang

Prof Clemente Zanco; Università di Milano; 30 July to 5 August 2017; functional  
analysis; FedUni; David Yost

Mr Yang Zhang; University of Science and Technology, China; 1 October 2015 to  
30 September 2017; pure; USN; Ruibin Zhang

---