



News

General News

European Girls' Mathematical Olympiad

The link below gives some exciting news about a new initiative the Australian Mathematics Trust is undertaking for 2018—supporting an Australian team competing at next year's European Girls' Mathematical Olympiad.

<http://www.amt.edu.au/egmo-announcement/>

To help support this initiative, the trust is recruiting for a part-time paid EGMO Team Leader position. The trust hopes that Society members can help identify a suitable candidate.

Interested candidates need to reply to the selection criteria (maximum two pages) and send through a CV to recruitment@amt.edu.au by close of business 13 October 2017 and should feel free to ring Nathan Ford (Chief Executive Officer, Tel: 02 6201 2440) if they have any questions.

Monash University

Monash University has established a new Centre for Quantitative Finance and Investment Strategies, after signing an historic collaboration agreement with French banking group BNP Paribas S.A.

<https://www.monash.edu/news/articles/monash-establishes-world-first-research-centre-zeroing-in-on-financial-markets>

Completed PhDs

Federation University Australia

- Dr Sara Hassani, *Optimality conditions for nonsmooth optimization problems via generalised derivatives*, supervisor: Musa Mammadov.

Queensland University of Technology

- Dr Jannah Baker, *Bayesian spatiotemporal modelling of chronic disease outcomes*, supervisor: Kerrie Mengersen.
- Dr Wang Jin, *Investigating the reproducibility of in vitro cell biology assays using mathematical models*, supervisor: Matthew Simpson.
- Dr Stuart Johnston, *Mathematical models for quantifying collective cell behaviour*, supervisor: Matthew Simpson.

- Dr Xing Ju Lee, *Statistical and simulation modelling for enhanced understanding of hospital pathogen and related health issues*, supervisor: Anthony Pettitt.

Swinburne University of Technology

- Dr Pinkee Dey, *Nonlinear thermomagnetic instabilities in ferromagnetic nanofluids*, supervisors: Sergey Suslov, Will Phillips.

University of Adelaide

- Dr Hammad Alotaibi, *Developing multiscale methodologies for computational fluid mechanics*, supervisors: Anthony Roberts, Barry Cox.

University of Melbourne

- Dr Jason Whyte, *Global a priori identifiability of models of flow-cell optical biosensor experiments*, supervisors: Tony Guttmann, Peter Taylor .
- Dr Ellen Victoria Muir, *Optimal market thickness and market design*, supervisors: Peter Taylor, Simon Loertscher.
- Dr Joanne Suk Chun Chew, *Skip-stop schedules for public transportation*, supervisors: Peter Taylor, Joyce Zhang.

University of New South Wales

- Dr Juan Ignacio Ortega Piwonka, *Stochastic models for optically trapped nanowires*, supervisors: Bruce Henry, Chris Angstmann.
- Dr Benoit Pasquier, *The ocean's global iron, phosphorus, and silicon cycles: inverse modelling and novel diagnostics*, supervisor: Mark Holzer.
- Dr Anna Tomskova, *Multiple operator integrals: development and applications*, supervisor: Fedor Sukochev.
- Dr Xin Zhang, *Probabilistic modelling of symbolic data and blocking collapsed Gibbs samplers for topic models*, supervisor: Scott Sisson.
- Dr Mengzhe Zhang, *Pricing derivatives under regime-switching models*, supervisor: Leung Chan.

University of Southern Queensland

- Dr Rajeev Prakash Bhanot, *Numerical simulation of reaction fronts in dissipative media*, supervisors: Dmitry Strunin, Thanh Tran-Cong, Duc Ngo-Cong.

University of Sydney

- Dr Ting-Ying Chang, *On singular solutions of weighted divergence operators*, supervisor: Florica Cirstea.
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Awards and other achievements

University of Melbourne

- Professor Aurore Delaigle was awarded the George W. Snedecor Award by the Committee of Presidents of Statistical Societies ‘for fundamental and groundbreaking contributions to the statistical theory of group testing of pooled laboratory samples, and for contributions to measurement error methods and density estimation’.

<http://community.amstat.org/copss/home>

University of Newcastle

- CARMA member Chris Kellett along with PhD candidate Salman Hafeez and Associate Professor Steven Weller have won the 2017 IFAC Foundation award for work showing how techniques in systems and control engineering can be applied to quantifying the economic damage of greenhouse gas emissions.

This inaugural award recognises a contribution which shows how automatic control science and technology can contribute to significant advances in the broad area of sustainable development.

International Best Cooperative Project Award Winner: National Schools’ Poster Competition

On 20 July 2017, at the International Statistical Institute’s (ISI’s) 61st World Statistics Congress, the National Schools’ Poster Competition (NSPC) which Peter Howley created was awarded the 2017 International Best Cooperative Project Award.

The International Best Cooperative Project Award, judged by peers and ISI members, is awarded every two years, in recognition of outstanding, innovative, and influential statistical literacy projects that affect a broad segment of the general public and involve the cooperation of different types of institutions (national statistical offices, schools, statistical societies, media etc).

University of Sydney

- Leon Poladian was given a Distinguished Service Award for the work he has done with the National Mathematics Summer School.
- Pengyi Yang has been announced as a finalist for the 2017 Eureka Prize for Outstanding Early Career Researcher.

Appointments, departures and promotions

Australian National University

- Dr Peter Vassiliou has joined the Department of Theoretical Physics.

Macquarie University

- Dr Christopher Green has taken up a continuing position.
- Dr Catherine Penington has taken up a continuing position.

Monash University*New staff:*

- Dr Hasan Fallahgoul
- Dr Kihun Nam
- Dr Mikhail Isaev

Departures:

- Professor Kate Smith-Miles

Queensland University of Technology

- Dr Kate Helmstedt, Lecturer in Operations Research, is a new staff member.
- Dr Christopher Green has completed his postdoctoral position.
- Dr Catherine Penington has completed her postdoctoral position.

University of Adelaide

- Dr Tuyen Truong (Research Associate, Pure Maths) left the School of Mathematical Sciences in August 2017.

University of Canberra

- Dr Peter Vassiliou has left the University of Canberra. He is now at the Department of Theoretical Physics, ANU.

University of Melbourne

- Binzhou Xia has been appointed as Lecturer in Graph Theory.
- Dr Yaping Yang has been appointed as Lecturer in Pure Mathematics.
- Prof Kate Smith-Miles has been appointed as Professor in Mathematics.
- Dr Nathan Clisby has moved to Swinburne University.

University of Newcastle

- Dr Michael Assis has been appointed a Postdoctoral Fellow starting on the 18 September.

University of New South Wales*Retirement:*

- Peter Brown has retired after 27 years at UNSW. In July the School of Mathematics and Statistics held a lunch to recognise Peter's retirement and to celebrate Peter's contributions to the School at UNSW and to providing support to secondary school teachers and to disadvantaged school students, and to the process of setting school examinations. In his speech at the lunch the Head of School Bruce Henry spoke eloquently including

saying ‘Peter is a talented and dedicated scholar and teacher; a person who is generous in sharing both their time and their skill; a person with the highest standards of integrity; a person ruled by logic, equity, and compassion, in fine balance; a highly valued and trusted colleague; a gentleman.’

University of Technology Sydney

New appointments, effective July 2017:

- Prof Lance Leslie (previously University of Oklahoma)
- A/Prof Murray Elder (previously University of Newcastle)
- A/Prof Mikhail Lapine (previously at UTS as research fellow)
- Dr Shev McNamara, Senior Lecturer (previously at UNSW)
- Aso FJ Hwang, was promoted to Senior Lecturer

New Books

University of Wollongong

Nickolas, P. (2017). *Wavelets: A Student Guide*. Australian Mathematical Society Lecture Series, Cambridge University Press. (ISBN: 9781107612518, paperback.)

Conferences and Courses

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

*For information about MATRIX programs,
see the report by David Wood in this issue.*

Number Theory Down Under

Dates: 29 September to 2 October 2017

Venue: La Trobe University, Bendigo

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

This year the Number Theory Down Under (NTDU) workshop will be held at La Trobe University Bendigo Campus from 29 September to 2 October. The workshop program and title/abstract of talks are now on the workshop website. There will be 32 talks, spanning a wide range of number theoretic interest and featuring speakers from nine different countries. If you fancy attending a few of the talks then please feel free to join us in the Business Building (B1.30). However, if you would like to participate in most of the conference we recommend you to formally register so that we count you for catering purposes.

Workshop on Applications in Natural Resource Mathematics (WANRM)

Dates: 3–5 October 2017

Venue: Global Change Institute, Rooms 275 and 273, University of Queensland, St Lucia

Web: <http://www.smp.uq.edu.au/CARM/conferences-and-workshops>

Registration is now open:

- Full registration: \$200
- 20% discount for AMSI, AustMS and ANZIAM members: \$160
- 50% discount for AustMS members who have free membership or pay reduced rate subscription: \$100
- Full-time students: \$25

Keynote Speakers:

- Richard Barker, University of Otago
- Michel De Lara, École des Ponts ParisTech
- Deborah (Dvora) Hart, NOAA, Woods Hole
- John Norbury, Oxford University
- Roger Cropp, Griffith University, Nathan
- Trevor Hutton, CSIRO, CMAR
- George Leigh, DAF, Brisbane
- Eva Plaganyi, CSIRO CMAR
- Jason Sharples, UNSW

Organising Committee:

- Clare McGrory, Conference Director
- Jerzy Filar, Director of CARM
- John Hearne, RMIT
- Joshua Ross, University of Adelaide
- Wen-Hsi Yang, Research Fellow CARM
- Sharon Lee, University of Queensland
- Matthew Holden, Research Fellow, CARM

In recent years, growing numbers of mathematical scientists have been working to develop and apply mathematical and statistical theory to produce tools that will have a direct impact in the management of fisheries, forestry, water security, conservation, pest and disease management, and adaptation to global changes. Their efforts have already had major impact on our understanding of important phenomena such as dynamics of ecosystems, sustainable fisheries, wildlife trafficking and bushfires.

This workshop aims to bring together many of the leading Australian researchers in these areas with three eminent international experts, early career researchers and PhD and Honours students to report their latest findings and exchange ideas on future developments. It will also provide early career researchers with a valuable forum to showcase and obtain feedback on their work from leading researchers in their field and gain insights into the open challenges within the broader area of natural resource mathematics.

Please email CARM at carm@maths.uq.edu.au for any further information.

This event is supported by AMSI and the AustMS, Global Change Institute and CARM.

MAGIC 2017 Mentoring and Guidance in Careers workshop

Dates: 13–17 November 2017

Venue: University House, Australian National University, ACT

Web: <http://wp.maths.usyd.edu.au/MAGIC/>

Contact: maths.joshiera@sydney.edu.au.

This workshop, for early-career female or gender-diverse researchers in mathematics and physics, will present an opportunity to explore the many facets of forging a career, in academic, government or industry settings, and to discuss how to create building blocks for success and resilience in careers.

Participation is limited to a maximum of 35 early career researchers (0–7 years post PhD) who are female or of diverse gender identity, who have a PhD in mathematical or physical sciences and are based in Australia. Interested researchers should submit an application, which is available at the MAGIC workshop website.

The application is simple—the applicants need to answer three questions and supply a two-page CV. Successful applicants will receive financial support for basic round-trip travel (economy) from their home institution to the workshop and will be provided accommodation from 12–16 November 2017 at University House, Australian National University, Canberra. A preliminary program is available on the website.

The workshop is organised by Professors Mahananda Dasgupta (ANU) and Nalini Joshi (The University of Sydney) and is supported through the Australian Research Council's Georgina Sweet Award as part of their Australian Laureate Fellowships. The organising committee members include Dr Merryn McKinnon from the Australian National Centre for Public Awareness of Science, ANU.

Inaugural Australian Algebra Conference 01

Dates: 27–29 November 2017

Venue: University of Technology Sydney

Web: <http://aac2017.ltumathstats.com/>

The event continues the proud tradition that was previously known as the Victorian Algebra conference. We especially encourage students to attend and to present a talk.

All information and registration details can be found at the website.

Gauge theory and higher geometry:

A conference honouring Michael Murray's 60th birthday

Dates: 27 November to 1 December 2017

Venue: University of Adelaide

Web: <http://www.iga.adelaide.edu.au/workshops/MKM60/>

This meeting will bring together leading researchers in Australia and abroad to discuss new developments in differential geometry, with a particular emphasis on the areas of gauge theory and higher geometry in which Michael Murray has made many important contributions over the last four decades.

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

Abstract submissions and registrations are now open for EMAC 2017, at the website.

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.

We are pleased to announce the following invited speakers:

- Dr Michael Forbes (<http://researchers.uq.edu.au/researcher/1931>)
- Prof Philippa Martin (<http://www.canterbury.ac.nz/engineering/schools/ece/contact-us/director-of-studies/philippa-martin.html>)
- A/Prof Caroline Yoon (<https://www.math.auckland.ac.nz/people/cyoo004>)
- Prof Graham Weir (<https://nz.linkedin.com/in/graham-weir-164a5986>)
- Dr Louise Olsen-Kettle (<https://www.swinburne.edu.au/research/our-research/access-our-research/find-a-researcher-or-supervisor/researcher-profile/?id=lolsenkettle>)

The ANZIAM Student Support Scheme will be available to student attendees of EMAC — see www.anziam.org.au/The+ANZIAM+Student+Support+Scheme.

Refereed proceedings will be published after the conference in the Electronic Supplement of the *ANZIAM Journal*. These will be subject to the journal's usual rigorous review process.

Key dates:

- Abstract submissions are now closed
- Early-bird registrations close: 15 October 2017
- Student Support Scheme applications close: 15 October 2017
- Proceedings papers due: 17 November 2017

WoMBaT 2017: Second Workshop on Metric Bounds and Transversality

Dates: 30 November to 2 December 2017

Venue: RMIT University

Web: <http://www.wombat.rmitopt.org/>

Lecture series by Frances Kirwan

Dates: 4–5 December 2017

Venue: University of Adelaide

Web: <http://www.iga.adelaide.edu.au/workshops/Kirwan2017/>

Professor Kirwan is a leading expert on moduli spaces in algebraic geometry, geometric invariant theory (GIT), and the link between GIT and moment maps in symplectic geometry. Her work endeavours to understand the structure of geometric objects by investigation of their algebraic and topological properties.

Registration deadline: 20 November 2017.

AMSI BioInfoSummer 2017

Dates: 4–8 December 2017

Venue: Monash University, Caulfield

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

Bioinformatics is an exciting discipline analysing and simulating both the structures and processes of biological systems. It is a constantly evolving field that offers researchers and students a wide breadth of opportunities. Running over a week, the AMSI BioInfoSummer 2017 will give attendees the opportunity to be involved at every level; from hands-on introductory levels for beginners through to specialist lectures from International speakers together with some of Australia's top scientists and academics.

Hosted this year by Monash University (Caulfield Campus), BioInfoSummer introduces bioinformatics and mathematical and computational biology to advanced undergraduate and postgraduate students, researchers, and professionals working in the fields of mathematics, statistics, computer science, information technology, complex systems analysis, and biological, chemical and medical sciences and engineering.

BioInfoSummer allows attendees to develop their mathematical skills, national networks and employability, and nurtures the collaborations between the mathematics, statistics and information technology disciplines. The symposium will cover areas of Data Visualisation, RNA-seq theory and practice, Proteomics and metabolomics data, Clinical bioinformatics and variant calling for disease and Single-cell genomics.

Future Directions in Representation Theory

Dates: 4–8 December 2017

Venue: The University of Sydney

Web: <https://sites.google.com/site/ausrepththeory/conference2017>

An international workshop on 'Future Directions in Representation Theory' will be held at The University of Sydney from 4 to 8 December 2017. This is the week before the annual AustMS meeting at Macquarie University in Sydney, which will include a special session on representation theory in addition to two plenary talks in the area.

The workshop will feature over 20 talks by international and Australian experts in representation theory and related areas of mathematics, with an emphasis on the developments that will shape the future of the field. For the list of speakers, for more information, and to register, please see the web-page

<https://sites.google.com/site/ausrepththeory/conference2017>.

Note that there are discounts on the registration fee for AustMS members, staff members at AMSI-member institutions, students, early-career researchers without grant support, and retired researchers. Students and early-career researchers at AMSI-member universities may apply for travel and accommodation subsidies from their department's AMSI travel fund. The workshop is sponsored by The University of Sydney, The University of Queensland, the National Science Foundation (USA), AMSI and AustMS

Invited speakers:

- David Baraglia (Adelaide)
- Jonathan Brundan (Oregon)
- Charlotte Chan (Michigan)
- Emily Cliff (UI Urbana-Champaign)
- Kevin Coulembier (Sydney)
- Olivier Dudas (Paris)
- Michael Ehrig (Sydney)
- Inna Entova-Aizenbud (Ben Gurion)
- Jessica Fintzen (Michigan)
- Anthony Licata (ANU)
- Gunter Malle (Kaiserslautern)
- Peter McNamara (Queensland)
- Scott Morrison (ANU)
- Arun Ram (Melbourne)
- Simon Riche (Clermont-Ferrand)
- Laura Rider (Georgia)
- Peng Shan (Orsay)
- Monica Vazirani (UC Davis)
- Ben Webster (Waterloo/Perimeter Institute)
- Ting Xue (Melbourne)
- Yaping Yang (Melbourne)

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.

Australian Mathematical Sciences Student Conference

Dates: 6–8 December 2017

Venue: University of Wollongong

Web: <https://www.amssc.org/2017/>

We are excited to announce that the Australian Mathematical Sciences Student Conference is returning this year, and we would like to extend a warm invitation to any and all interested honours and postgraduate level students in the areas of Mathematics and Statistics.

The AMSSC is an annual conference run by students, for students. It aims to offer a friendly and relaxed environment in which to build and maintain connections, encourage collaboration, and present research.

Attending students are encouraged to present a short talk, with cash prizes being awarded to the best in each of several categories. Travel support will be available through AMSI and AustMS. Please note that registration for the event closes on 6 November, and applications for financial support close on 22 September.

For more information, or to register, please visit the following webpages, which will be updated frequently as more details are confirmed.

Registration: <https://uow.onestopsecure.com/OneStopWeb/AMSSC2017>

Facebook: <https://www.facebook.com/AMSSConference/>

Integrable Systems 2017 (fifth annual workshop)

Dates: 7–8 December 2017

Venue: University of Sydney

Web: <http://wp.maths.usyd.edu.au/igs/workshops/integrable-systems-2017/>

AMSI Summer School 2018

Dates: 8 January to 2 February 2018

Venue: Monash University

Web: <http://amsi.org.au/events/event/summer-school-2018/>

The annual AMSI Summer School is the biggest national event for maths students in Australia with a record-breaking attendance of 168 students in 2017. In January 2018 this four-week residential school will be hosted by Monash University (Clayton Campus), providing students from across Australia with the opportunity to develop their mathematical skills, meet like-minded people and network with potential future employers at the Careers Afternoon.

Data61 6th International Optimisation Summer School

Dates: 14–19 January 2018

Venue: Kioloa, NSW

Web: <http://tinyurl.com/optschool>

Spend a week by the beach learning about the latest optimisation technologies. How can you help a business reduce its costs? Or reduce their carbon footprint? Or do both? The school is sponsored by the Decision Sciences Group at Data61

The school will focus on solving large scale combinatorial optimisation problems in practice. The school is intended for undergraduate students (3rd year or later), masters or early stage PhD students. Every undergraduate participant will be assigned an individual mentor.

Topics covered include: introduction to constraint programming, modelling, integer programming, column generation, vehicle routing, scheduling, evolutionary methods and research skills. Lecturers include Phil Kilby, Peter Stuckey, Guido Tack, Menkes van den Briel and Toby Walsh.

Please encourage your PhD, Masters and late stage undergraduates to attend.

The registration page is open now and applicants will be considered in order of application so please apply as soon as possible. The school costs \$685. Undergraduates and postgraduates will qualify for a grant to reduce this to just \$340. Data61 students can attend at no cost for themselves. The fee covers five nights accommodation, all food and drink, and the coach transfer from Sydney.

Postgraduate, postdoctoral and industry applicants, please complete the form <http://tinyurl.com/optschool-apply>.

Undergraduate applicants, please complete this form <http://tinyurl.com/optschool-undergrad>.

ANZAMP meeting

Dates: 30 January to 1 February 2018

Venue: Spencer on Byron Hotel in Takapuna, Auckland, New Zealand

Web: <http://www.anzamp.austms.org.au/meetings/current/>

Contact: David Ridout, david.ridout@unimelb.edu.au

Registration for the Sixth Annual Meeting of the Australian and New Zealand Association of Mathematical Physics is now open. This year the meeting is hosted by the University of Auckland, in a central beachside suburb with many good restaurants and cafes.

An additional day (also at the Spencer on Byron Hotel), 2 February, will be dedicated to a celebration of the career of Ernie Kalnins.

The program committee is pleased to announce the plenary speakers for ANZAMP 2018:

- Vladimir Bazhanov (ANU)
- Maria Eugenia Gabach Clement (Cordoba, Argentina)
- Natasa Pavlovic (UT Austin, USA)
- Tanja Schilling (Freiburg, Germany)
- Luc Vinet (CRM, Montreal)
- Jingbo Wang (UWA)

The meeting has a tradition of encouraging contributed talks in a wide range of topics in mathematical physics. Especially encouraged are talks from ANZAMP student members who are eligible to compete for the A J Guttmann student talk prize.

The earlybird registration deadline is Wednesday 1 November 2017 and the abstract deadline is Wednesday 15 November 2017.

Please register and book accommodation early. We are holding only a limited number of special-rate rooms at the Spencer on Byron.

For further information, including registration, transport and accommodation, see the conference website.

For the Ernie Kalnins celebration on 2 February, ‘Harnessing hidden symmetry — geometry and superintegrable systems’, see <http://web.maths.unsw.edu.au/~jonathan/KalninsFest2018/>.

Confirmed speakers include:

- Luc Vinet (Montreal)
- Vladimir Matveev (Jena)
- George Pogosyan (Yerevan)
- Willard Miller (Minnesota) (TBC)

Further details and registration details TBA. For questions please contact Jonathan Kress, j.kress@unsw.edu.au.

ANZIAM 2018

Dates: 4–8 February 2018

Venue: Hotel Grand Chancellor, Hobart

Web: <http://www.maths.utas.edu.au/anziam2018/>

This conference is the premier annual meeting in Australia and New Zealand, where leading and young applied mathematicians gather to exchange ideas to promote and advance the application of mathematics to science, engineering and industry.

IUTAM Symposium on Recent Advances in Moving Boundary Problems in Mechanics

Dates: 12–15 February 2018

Venue: University of Canterbury, Christchurch, New Zealand

Web: <https://iutam2018.nz/>

Many problems in mechanics involve deformable domains with moving boundaries.

Examples include:

- fluid-structure interaction
- free surface flows
- flows over soft tissues and textiles
- flows involving accretion/erosion
- flows through deformable porous media
- material forming
- shape optimisation

to name but a few.

The interaction of the moving boundary with the participating media leads to fascinating phenomena in a very broad range of contexts such as:

- flutter
- wave-breaking
- dune formation
- ripple formation on the ocean floor
- flow instabilities
- structure resonance and failure
- atherosclerosis
- ice formation on aircraft wings.

This symposium, which is going to be the first IUTAM Symposium in New Zealand, aims to gather the community of engineers and scientists involved in moving boundary and related problems in mechanics.

IUTAM 2018 will facilitate a mix of researchers working on the development of related mathematical methods and algorithms, and applications of recent and ongoing problems. We also encourage researchers performing experiments related to moving boundary problems to participate. Since the community of researchers involved in moving boundary problems in mechanics is fairly fragmented, we believe that this symposium will be a unique opportunity to cross-fertilise ideas and concepts from different disciplines of mechanics and foster engineering applications.

Symposium organization:

- Dr Stefanie Gutschmidt
- A/Prof Mathieu Sellier

Important deadlines

- Submission of abstracts: 20 October 2017
- Notification of acceptance: 24 November 2017
- Early bird registration: 30 November 2017

Harmonic Analysis Conference Celebrating the Mathematical Legacy of Alan McIntosh

Dates: 12–16 February 2018

Venue: Australian National University

Web: <http://maths.anu.edu.au/events/harmonic-analysis-conference-celebrating-mathematical-legacy-alan-mcintosh>

In August 2016, the world lost a greatly original and highly influential mathematical analyst, Alan McIntosh. For almost fifty years, Alan McIntosh had been a symbol of the strength of Australian mathematics, and a key figure in the fields of harmonic analysis and operator theory worldwide. The 2018 Special Year in Analysis at the MSI will start with a conference honouring Alan's memory, and mathematical legacy. It will be a milestone event, bringing together Alan's former students and collaborators, as well as some of the very best international experts in his field.

Organisers:

- Neil Trudinger (Applied & Nonlinear Analysis, MSI, Australian National University)
- Pierre Portal (Analysis & Geometry, MSI, Australian National University)
- Xuan Duong (Macquarie University)

Speakers

- Pascal Auscher (Universite Paris Sud-Orsay)
- Lashi Bandara (University of Gothenburg)
- Ronald Coifman (Yale University)
- Thierry Coulhon (Office of the President of the Republic)
- Michel Christ (University of California-Berkeley)
- Michael Cowling (University of New South Wales)
- Ian Doust (University of New South Wales)
- Steve Hofmann (University of Missouri-Columbia)
- Jeff Hogan (University of Newcastle)
- Tuomas Hytonen (University of Helsinki)
- Svitlana Mayboroda (University of Minnesota)
- Sylvie Monniaux (Universite Aix-Marseilles)
- Andrew Morris (University of Birmingham)
- Stefanie Petermichl (Universite de Toulouse)
- Cristina Peyrera (University of New Mexico)
- Tao Qian (University of Macau)
- Werner Ricker (Katholische Universitt Eichsttt-Ingolstadt)
- Stefan Steinerberger (Yale University)

- Tom ter Elst (University of Auckland)
- Lesley Ward (University of South Australia)

Workshop on Effective Visualisation in the Mathematical Sciences 3

Date: February, 2018

Venue: Newcastle (exact dates and location to be decided later)

Web: <https://carma.newcastle.edu.au/meetings/evims3/>

Meeting organisers:

- Prof Michael Barnsley, Australian National University
- Dr Judy-anne Osborn, CARMA, The University of Newcastle Venue

Contact information:

- Juliane Turner, Juliane.Turner@newcastle.edu.au, Phone: (02) 492 15483.

Workshop in Microlocal Analysis

Dates: 18–23 March 2018

Venue: Murramarang Beachfront Mill Beach, South Durras, NSW

Web: www.murramarangresort.com.au

Microlocal analysis is an extremely active contemporary research topic. Although initially developed as a tool to solve linear partial differential equations, its influence is increasingly felt in a diverse range of fields, as illustrated for example by Hintz and Vasy's recent proof of global nonlinear stability of the Kerr-de Sitter family of spacetimes in general relativity, or the recent applications of microlocal analysis to dynamical systems, led by advances due to Faure, Tsujii, Dyatlov, Zworski, and many others.

This workshop will bring together many of the leading international players to present the latest developments, and aims to provide the best possible environment for participants to plan new collaborations and new research directions.

Organisers

- Andrew Hassell (Analysis & Geometry, MSI, Australian National University)
- Jesse Gell-Redman (Analysis, University of Melbourne)

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.

Prof Jorgen Ellegaard Andersen; Aarhus University; November/December 2017;
UAD

- Prof Jon Brundan; University of Oregon; 6 November to 12 December 2017; pure; USN; Geordie Williamson
- Prof Rob Corless; Western University, Canada; 3–8 October 2017; numerical analysis; USA; Yalçın Kaya
- 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
- Asen Dontchev; University of Michigan; 18 February to 4 March 2018; optimisation; FedUni; Alex Kruger
- Mr Christopher Doris; Bristol; 15 October to 15 December 2017; MAGMA; USN; John Cannon
- Prof Dr Brigitte Forster-Heinlein; University of Passau; 29 October to 10 November 2017; splines; UNC; jeff.hogan@newcastle.edu.au
- Prof Massimo Grossi; University of Roma; 3–17 December 2017; pure; USN; Daniel Hauer
- Mr Yongyi Gu; Guangzhou University, China; 25 October 2016 to 31 October 2017; CUT
- Rene Henrion; Weierstrass Institute for Applied Analysis and Stochastics in Berlin; 26 November to 3 December 2017; optimisation; FedUni; Alex Kruger
- John Knight; University of Sydney; 20 April to 18 October 2017; ANU; Steve Roberts
- Prof Decio Levi; Roma Tre University; 6 to 9 December 2017; applied; USN; Nalini Joshi
- Prof Nicolas Libedinsky; University of Chile; 15 September to 15 November 2017; pure; USN; Geordie Williamson
- Prof Dong Liu; Huzhou University; 1 August to 31 October 2017; pure; USN; Ruibin Zhang
- Dr Peter Massopust; Technical University of Munich; 2–13 October 2017; splines; UNC; jeff.hogan@newcastle.edu.au
- Prof Helmut Maurer; University of Münster, Germany; 23–27 October 2017; optimal control — theory and applications; USA; Yalçın Kaya
- Prof Kaisa Miettinen; University of Jyväskylä, Finland; 5–6 October 2017; Multi-objective optimization — theory and applications; USA; Regina Burachik
- 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
- Prof Angela Pistoia; 3–17 December 2017; pure; USN; Daniel Hauer
- Raymond Preusser; University of 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
- Dr Mariano Rodrigo; University of Wollongong; QUT; Petrus van Heijster, Graeme Pettet
- Prof Piotr Rykbka; Warsaw University; 1 August to 30 September 2017; UOW; Glen Wheeler

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

Dr Martin Schmidt; 9 November to 21 December 2017; pure; USN; Emma Carberry

Prof Keisuke Shiromoto; Kumamoto University, Japan; 1 September 2017 to 31 March 2018; coding theory and combinatorics; MNU; Graham Farr

Dr Dario Strbenac; 6 June to 31 December 2017; statistics; USN; Jean Yang

Mr Diego Tapias Galindo; UNAM; 15 August 2017 to 15 February 2018; applied; USN; Eduardo Altmann

Michel Thera; University of Limoges; 27 November to 3 December 2017; optimisation; FedUni; Alex Kruger

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

Mr Frederic Weber; University of Ulm; 15 March to 15 June 2018; pure; USN; Daniel Daners

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

Dr Francis Woodhouse; University of Cambridge; QUT; Matthew Simpson

Prof Rei Yamazaki (Inoue); Chiba University; 4–10 December 2017; applied; USN; Nalini Joshi

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