

General News

University of New South Wales

- Our School hosted 15 indigenous students this year through the Nura Gili Winter School culminating in a talk from Chris Tisdell on the need for mathematics, paths to mathematical careers and university life. The Winter School has a demonstrated success rate with a high percentage of its graduates going on to participate in higher education.
- The School was delighted to celebrate the 50th Year of its High-School Mathematics Competition on Friday 16 September. More information may be found at www.maths.unsw.edu.au/highschool/school-mathematics-competition.

Completed PhDs

Griffith University

• Dr Barbara Johnson, Decadal-scale variability in the meridional circulation of iron-rich Upper Circumpolar Deep Water and its impact on primary production in the Southern Ocean, supervisors: Albert Gabric, Gurudeo Anand Tularam.

Macquarie University

- Dr Paul Emanuel, Covering systems, supervisor: Gerry Myerson.
- Dr David Oury, Duality for Joyal's category Theta and homotopy concepts for Theta-sets, supervisors: Ross Street and Dominic Verity.

University of Adelaide

- Dr James Wallbridge, *Higher Tannaka duality*, supervisors: Bertrand Toen, Mathai Varghese and Michael Murray.
- Dr Tyson Ritter, Acyclic embeddings of open Riemann surfaces into elliptic manifolds, supervisors: Finnur Larusson and Nicholas Buchdahl.

University of Melbourne

- Dr Alison Thomson, Frobenius graphs as interconnection networks, supervisor: Sanming Zhou.
- Dr Khurram Kamran, Modelling the gentle bouncing of a drop, supervisor: Steve Carnie.

University of New South Wales

• Dr Hugo Bowne-Anderson, *The explicit construction of orders on surfaces*, supervisor: Daniel Chan.

University of Queensland

• Dr Geoffrey Martin, Some results on decompositions of circulant graphs and embeddings of partial cycle systems, supervisor: Darryn Bryant.

University of South Australia

• Dr Hamideh Anjomshoa, Optimal placement of passing bays in underground mines, supervisors: Peter Pudney, David Lee and Amie Albrecht.

University of Sydney

• Dr Parinya Sa Ngiamsunthorn, *Domain perturbation for parabolic equations*, supervisor: Daniel Daners.

University of Western Australia

- Dr Seyed Hassan Alavi, On triple factorisations of finite groups, supervisors: Cheryl Praeger and John Bamberg.
- Dr Hua Zhang, Primitive permutation groups with soluble stabilizers and applications to graphs, supervisors: Cai Heng Li and Cheryl Praeger.

Awards and other achievements

Laureate Fellowships

Congratulations to the following mathematical scientists on their recently announced Australian Laureate Fellowships:

- Peter Barlett (Queensland University of Technology) for the project 'Large-scale statistical machine learning'
- Peter Hall (The University of Melbourne) for the project 'New directions, new problems and new data types in statistical science'
- Ian Petersen (The University of New South Wales) for the project 'Consensus, estimation and control in complex large-scale quantum systems'

University of Ballarat

• The University of Ballarat has recently received significant new funding from the Australian Government under the Collaborative Research Networks (CRN) program. CRN is expected to involve some research positions and PhD scholarships in optimisation.

University of Melbourne

• Hugh Miller is one of six PhD graduates from 2010 to be awarded the Chancellor's Prize for excellence. Hugh was supervised by Peter Hall.

University of Queensland

• Elizabeth Forbes, an undergraduate student studying mathematics and medicine, won an expenses-paid trip to Germany to receive a 'Brains for Brains' award for undergraduate research, at the Bernstein Computational Neuroscience Conference in October 2011. This award was for the paper 'The combinatorics of neurite self-avoidance', Neural Computation, 23, 2746–2769 (2011), by E.M. Forbes, J.J. Hunt and G.J. Goodhill.

University of Western Australia

• Cheryl Praeger gave the 2011 Moyal Lecture entitled 'Symmetry, group actions, and the meaning of life', and received the Moyal Medal at Macquarie University on 26 October.

Appointments, departures and promotions

Griffith University

• Dr Barbara Johnson is a recently appointed mathematics lecturer at Griffith University's School of Biophysical Sciences situated in the Faculty of Science Environment Engineering and Technology (SEET).

University of Adelaide

Dr Luke Bennetts has joined the school as a lecturer in applied mathematics.

University of Melbourne

- Ian Gordon, the Director of the Statistical Consulting Centre, has been promoted to Professor (effective January 2012).
- Dr Paul Sobaje has been appointed as Research Fellow.
- Dr Debadi Chakraborty has been appointed as Research Fellow.
- Ms Kally Yuen has been appointed as Statistician/AMSI.

- Dr Wellington Galleas has been appointed as Research Fellow/MASCOS.
- Dr Justin Wishart has been appointed as Research Fellow.

University of New South Wales

• We welcome Dr Anna Cai and Dr David Harvey to our School.

University of Queensland

Dr Zoltan Neufeld has been appointed as Senior Lecturer in Applied Mathematics. His research interests are in mathematical biology and nonlinear dynamics. He is currently at University College Dublin, and will be taking up his position in January 2012.

University of Sydney

- Dr Jonathan Hillman, Reader, will retire as of 16 November 2011.
- Dr Claus Fieker, Senior Research Fellow with the MAGMA group, resigned as of 1 July 2011.
- Christian Oliver-Ewald, Associate Professor in Financial Mathematics, resigned as of 29 July 2011.
- Dr Wen-Kai Wang, Research Associate, left at the end of his contract on 10 June 2011.
- Dr Penghao Wang, Research Associate, resigned as of 18 September but will remain in active collaboration with the University.
- Dr Robert Marangell, working with Martin Wechselberger, started on 1 September 2011.
- Dr Davide Masoero, working with Nalini Joshi, started at the end of October 2011.
- Dr Takuya Matsumoto, working with Alex Molev, started on 5 September 2011.
- Prof Jun Hu, Principal Research Fellow working with Andrew Mathas, started on 1 August 2011.

New Books

University of Newcastle

Borwein, J.M. and Skerritt, M.P. (2011). An Introduction to Modern Mathematical Computing. Springer.

Conferences and Courses

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

Joint meeting of the NSW-ACT ANZIAM branches

Date: 24-25 November 2011

Venue: Murramarang Beachfront Nature Resort, South Durras

A joint meeting of the NSW and ACT Branches of ANZIAM will be held on Thursday 24 and Friday 25 November (ending at around 1 pm) at the Murramarang Beachfront Nature Resort, Mill Beach, Banyandah St, South Durras (www.murramarangresort.com.au).

The registration desk will open at 1:30 pm on Thursday 24 November and the meeting will start at 2:15 pm in the Myrtle Beach room (to be confirmed).

Delegates are strongly encouraged to stay at the resort as special rates have been negotiated and have been included in the registration fee.

Registration fee:

Student member of ANZIAM	\$90
Members of ANZIAM	\$100
Former Chairs of ANZIAM	\$90
Non-members of ANZIAM	\$150
Accompanying person	\$40
Children (4–16)	\$30
Children under 4	Free
Non-residential delegate	\$80

The conference registration fee includes the following:

- Twin share accommodation for the night of Thursday 24 November
- Afternoon tea on Thursday 24 November
- Dinner on Thursday 24 November (either a three-course alternate serve dinner or a buffet, depending on the numbers, but is exclusive of drinks)
- Continental breakfast for the morning of Friday 25 November
- Morning tea on Friday 25 November
- Lunch on Friday 25 November.

The registration fee must be paid on the day itself to Harvi Sidhu. Please do not pay the registration fee to the resort.

Important: Since we have to provide firm numbers of delegates to the resort a few weeks before the conference commences it is crucial that delegates confirm their attendance before 5 November by sending an email to Harvi Sidhu (h.sidhu@adfa.edu.au) with a clear indication of attendance at the meeting. (Abstracts can be sent a few days before the meeting.)

Extra information that is required:

- (a) Type of accommodation: single/family/twin-share. If twin-share, who would you be sharing with? (Note: The twin-share cabins have separate ensuites. Also, single and family cabins will attract an extra \$50 in registration costs.)
- (b) Any dietary requirements.

A limited amount of money may be available to contribute towards the costs of student presenters (provided that they are members of either ACT or NSW ANZIAM). This will take the form of a contribution towards accommodation and travel costs. A prize will be awarded for the best student presentation. Furthermore, due to the limited number of timeslots allocated to speakers, preferences will be given to presentations by students. The allocated time for each speaker is 20 minutes (this includes the 3–5 minutes for questions from the audience).

During the course of the meeting the NSW and ACT ANZIAM branches will hold their annual general meetings to elect committees for 2012.

Anyone wishing to stand for election should contact Ngamta (Natalie) Thamwattana (Branch President, NSW, ngamta@uow.edu.au) or Harvi Sidhu (Branch President, ACT, h.sidhu@adfa.edu.au).

Please send title/abstract of presentations to Harvi Sidhu (h.sidhu@adfa.edu.au). For further information please do not hesitate to contact either Harvi or Mark Nelson (mnelson@uow.edu.au).

Professional Development Short Course for Mathematics Teachers

Date: Friday 25 November 2011

Venue: Webster Theatre A, Robert Webster Building, UNSW Kensington campus Web: www.science.unsw.edu.au/unsw-pd-short-course-for-mathematics-teachers

Hosts: Mr Peter Brown and Mr Milan Pahor

Volcanic Delta 2011

Date: 27 November – 2 December 2011

Venue: Rotorua, NZ Web: www.delta2011.co.nz

International Workshop on Hadamard Matrices and their Applications

Date: 28-30 November 2011

Venue: RMIT University, Melbourne Web: www.rmit.edu.au/mathsgeo/iwhma

Talks in areas related to Hadamard matrices and their applications are invited. Please email a title and abstract to Asha Rao (asha@rmit.edu.au). Papers may also be submitted to *The Australasian Journal of Combinatorics* (ajc.maths.uq.edu. au) for possible inclusion in a special volume.

Conference attendance is not a pre-requisite for submitting a paper.

Workshop on Experimental and Analytical Mathematics

Date: 29 November – 1 December 2011 Venue: University of Newcastle Web: carma.newcastle.edu.au/jonfest

A Workshop on Experimental and Analytical Mathematics marking the occasion of Jonathan Borwein's 60th Birthday will be held at the University of Newcastle.

Jonathan Borwein is known throughout the Australian mathematics community and to recognise his 60th Birthday in 2011 this workshop will focus on many of his interests which span optimisation, functional and nonlinear analysis, operations research, mathematical programming, number theory, special functions, experimental and computational mathematics as well as high-performance computing.

Further details and the registration form can be found at the website. Sponsored by AMSI and CARMA.

The 29th Victorian Algebra Conference

Date: 1-2 December 2011

Venue: La Trobe University, Melbourne

Web: vac2011.ltumathstats.com

10th Engineering Mathematics and Applications Conference (EMAC2011)

Date: 4–7 December 2011

Venue: University of Technology, Sydney

Web: www.emac2011.com.au

Contact: Chair of the EMAC Organising Committee, Mary.Coupland@uts.edu.au

The abstract submission closing date has been extended until 11 November 2011.

AMSI Summer Symposium in Bioinformatics (BioinfoSummer 2011)

Date: 5-9 December 2011

Venue: Gene Technology Access Centre, Melbourne Web: bioinf.wehi.edu.au/bioinfosummer2011

The Australian Mathematical Sciences Institute (AMSI), EMBL Australia, Bioplatforms Australia and The Walter Eliza Hall Institute are holding a summer school in bioinformatics. This event is a major annual bioinformatics education and outreach program in Australia which draws over 120 participants who are interested in learning and applying bioinformatics.

The program covers state-of-the-art technologies used in medical and biological research and also teaches fundamentals of bioinformatic data analysis. This year we have a strong emphasis on Massively Parallel Sequencing technologies, with two full days on research projects and methods using these technologies.

Daily themes:

- Introduction to Biology and Bioinformatics
- Molecular Evolution
- Genetic Variation and Massively Parallel Sequencing
- Cancer Genomics and Massively Parallel Sequencing
- Proteomics and Metabolomics.

Confirmed speakers:

- Professor Terry Speed (WEHI)
- Associate Professor Catherine Abbott (Flinders University)
- Associate Professor Melissa Southey (University of Melbourne)
- Associate Professor David Thomas (Peter McCallum Cancer Centre)
- Dr Ana-Teresa Maia (Cambridge Cancer Centre, UK)
- Dr Sohrab Shah (University of British Columbia, Canada)
- Dr Christina Boucher (University of California, San Diego, USA)
- Dr Xiting Yan (Yale University, USA)
- Dr Bruno Gaeta (University of New South Wales)
- Dr Ute Baumann (University of Adelaide)
- Dr Matthew Wakefield (WEHI)
- Dr Arun Konagurthu (Monash University)
- Dr Kathryn Holt (University of Melbourne)
- Dr Melanie Bahlo (WEHI)
- Dr Xiting Yan (Yale University, USA)
- Dr Ana-Teresa Maia (Cambridge Cancer Centre, UK)
- Dr Tony Papenfuss (WEHI)
- Dr Karin Kassahn (University of Queensland)
- Dr Vladmir Likic (Bio21)
- Dr Amsha Nahid (WEHI)
- Dr Wade Hines (Australian Wine Research Institute)
- Eugene Kapp (WEHI)

For more information and registration, visit the website.

The 35th Australasian Conference on Combinatorial Mathematics and Combinatorial Computing (ACCMCC)

Date: 5-9 December 2011

Venue: Monash University, Melbourne Web: users.monash.edu.au/~accmcc

12th Asian Logic Conference

Date: 15-20 December 2011

Venue: Victoria University of Wellington Web: msor.victoria.ac.nz/Events/ALC2011

First Australian-New Zealand Rotating Flows Workshops

Date: 9-11 January 2012

Venue: Mudbrick Winery, Waiheke Island, Auckland, New Zealand

Web: www.maths.adelaide.edu.au/jim.denier/RFW

This workshop, organised by the School of Mathematical Sciences at the University of Adelaide and the Department of Engineering Science at the University of Auckland, will bring together world leading researchers in the broad field of rotating flows. The workshop is sponsored by AMSI, the School of Mathematical Sciences, the University of Auckland and the Royal Society of New Zealand. Please visit the workshop website for further details.

ANZIAM 2012

Date: 29 January – 2 February 2012 Venue: Warrnambool, Victoria Web: anziam2012.monash.edu

We are pleased to announce the following invited speakers:

- Professor Kambiz Vafai
- Professor Helen Byrne
- Professor Pamela Cook
- Professor Graeme Pettet
- Professor Andrew Eberhard
- Professor Barry Hughes
- Professor Tim Marchant
- Dr Ilze Ziedins
- Dr Frances Kuo

Registration for the conference and submission of abstracts is now open via the conference website. Early-bird registration will close on 2 December 2011, and early-bird submission of abstracts will close on 16 December 2011.

Further details of the conference are available at the website.

MISG 2012

Date: 5–10 February 2012 Venue: RMIT University

Web: www.rmit.edu.au/maths/misg

Conference and MAGMA Workshop on 'Symmetries of Discrete Objects'

Date: 13–17 February 2012

Venue: Rydges Lakeland Resort Hotel, Queenstown, New Zealand

Web: www.math.auckland.ac.nz/~conder/SODO-2012 Contact: Marston Conder (m.conder@auckland.ac.nz)

MCQMC 2012: Tenth International Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing

Date: 13–17 February 2012

Venue: Sydney

Web: www.mcqmc2012.unsw.edu.au

Contact: Ian H. Sloan, Frances Y. Kuo, Josef Dick, Gareth Peters

(mcqmc2012@unsw.edu.au)

International Number Theory Conference

Date: 12-16 March 2012

Venue: Noah's on the Beach, Newcastle Web: carma.newcastle.edu.au/jonfest

An International Number Theory Conference in memory of Alf van der Poorten will be held at Noah's on the Beach in Newcastle.

The purpose of the conference is to celebrate and promote number theory research in Australia and to commemorate the research and legacy of Alf van der Poorten, AM.

Further details and the registration form can be found at the website. Sponsored by AMSI, AustMS and CARMA.

MTNS 2012: 20th International Symposium on Mathematical Theory of Networks and Systems

Date: 9-13 July 2012

Venue: University of Melbourne Web: www.mtns2012.com.au

Vale

Professor C.A. Hurst

We inform members that Professor C.A. Hurst AM FAA, a foundation member of the Society, died on Wednesday 19 October.

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.

Pierre-Olivier Amblard; CNRS, France; 1 August 2010 to 28 February 2013; -; UMB; Owen Jones

- Prof. Ramona Anton; University Pierre et Marie Curie; 1–31 November 2011; –; ANU; Andrew Hassell
- Ms Suci Astutik; Institut Teknologi Sepuluh Nopember, Indonesia; 3 October to 30 December 2011; –; UWA; Gopal Nair
- Dr Eric Ragoucy-Aubezon; Theoretical Physics Laboratory; 3 October to 4 November 2011; quantum groups; USN; Alexander Molev
- Dr Patrick Baker; Monash University; -; 25 July to 31 December 2011; UMB; Andrew Robinson
- Paul Baum; -; 1 August to 20 December 2011; -; ANU; Alan Carey
- Prof. Lynne Billard; University of Georgia, USA; 15 November to 13 December 2011; –; UMB; Richard Huggins
- Dr Johannes Breidenbach; Norwegian Forest and Landscape Institute, Norway; 24 October to 6 November 2011; -; UMB; Andrew Robinson
- Toke Carlsen; University of Trondheim, Norway; 1 October to December 2011; -; UWG; A. Sims
- Prof. Bill Casselman; University British Columbia; 1–30 November 2011; MAG-MA; USN; John Cannon
- Dr Ebrima Ceesay; Booz Allen Hamilton, USA; during 2011; –; UBR; Paul Watters
- Dr Chuanzhong Chen; Hainan Normal University, PR China; 15–30 November 2011; –; UMB; Aihua Xia
- Jing Chen; Central South University, China; January 2011 to January 2012; -; UWA; Cai Heng Li
- Prof. Stephane Crepey; Universite d'Evry; 15–23 December 2011; financial mathematics; USN; Marek Rutkowski
- Prof. Richard Dipper; Stuttgart University; 6 November to 16 December 2011; linear groups; USN; Andrew Mathas
- Dr Vida Dujmovic; Carleton University, Ontario; 3 October 2011 to 31 March 2012; –; UMB; David Wood
- Prof. Matthew Dyer; University of Notre Dame; 21 October to 28 November 2011; subalgebras of affinisations; USN; Gus Lehrer
- Prof. Chris Field; Dalhousie University; 4 November to 8 December 2011; –; ANU; Alan Welsh
- Eric Grunsky; -; 1-30 November 2011; -; ANU; Alan Welsh
- Ms Joanna Hutchinson; University of Bristol; 17 October 2011 to 1 April 2012; –; UMB; Peter Forrester
- Prof. Monique Jeanblanc; Université d'Evry; 13–24 December 2011; financial mathematics; USN; Marek Rutkowski
- Dr Gwenael Joret; Université libre de Bruxelles; 5 September 2011 to 4 March 2012; –; UMB; David Wood
- Karolina Korvasova; Utrecht University, The Netherlands; 31 August 2011 to 31 July 2012; –; UMB; Kerry Landman
- Prof. Donald Kreher; Michigan Technological University; 1 December 2011 to 31 May 2012; –; UNC; Brian Alspach
- Prof. Tony Krzesinski; University of Stellenbosch, South Africa; 11 November to 19 December 2011; –; UMB; Peter G. Taylor

- Alex Kumjian; University of Nevada, USA; July to December 2011; -; UWG; D. Pask and A. Sims
- Prof. Valerie Lemay; The University of British Columbia; 4 November to 10 December 2011; -; UMB; Andrew Robinson
- Prof. Malwina Luczak; University of Sheffield; 10–24 November 2011; -; UMB; Aihua Xia
- Prof. Malwina Luczak; University of Sheffield; 31 October to 12 November 2011; applied probability; UQL (MASCOS); Phil Pollett
- Prof. Nicolae Mihalache; University of Paris; 5 November to 5 December 2011; -; ANU; Michael Barnsley
- Mr Takeshi Morita; Osaka University; 1 October 2011 to 31 January 2012; integral systems; USN; Nalini Joshi
- Dr Michalis Mourao; University of Warwick; 14 October to 10 November 2011; MAGMA; USN; John Cannon
- Mr Nobutaka Nakazono; Kyushu University; 1 September 2011 to 1 March 2012; integrable systems; USN; Nalini Joshi
- Mark Nelson; University of Wollongong; second half 2011; –; USA; Bronwyn Hajek Prof. Micheal O'Searcoid; University College, Dublin; 21 November 2011 to 16 January 2012; –; UMB; Aleks Owczarek
- Dr Dedi Rosadi; Gadjah Mada University; 3 October to 30 November 2011; time series; USN; Shelton Peiris
- Katja Sagershnig; University of Vienna; 1 May 2011 to 31 December 2012; -; ANU; Michael Eastwood
- Dr Sujit Sahu; University of Southampton; 1–30 November 2011; -; ANU; -
- Dr Ludmila Scharf; Freie University, Berlin; 14 November to 20 December 2011; —; UMB; David Wood
- Dr Daria Schymura; Freie University, Berlin; 14 November to 20 December 2011; –; UMB; David Wood
- Karen Smilowitz; Northwestern University; January to June 2012; –; UNC; N. Boland
- A/Prof. Liz Stanhope; Lewis and Clark College, USA; –; 22 August 2011 to 22 May 2012; UMB; Craig Westerland
- Dr Kilkothur Munirathinam Tamizhmani; Pondicherry University; 1–28 February 2012; integrable systems; USN; Nalini Joshi
- Mr Hakan Tor; Turkey; May to November 2011; -; UBR; Adil Bagirov
- Prof. Wei Wang; Nanjing Normal University, China; during 2011; -; UBR; Paul Watters
- Dr Lesley Ward; University of South Australia; 5–8 November 2011; –; ANU; Alan McIntosh
- Prof. Richard Wood; Dalhousie University, Canada; 15 December 2011 to 31 March 2012; category theory; MQU; Ross Street
- Mr Chunguang Xia; University of Science and Technology, China; 1 November 2010 to 31 October 2012; algebra and representation theory; USN; Ruibin Zhang
- Dr Sukru Yalcinkaya; –; September 2011 to November 2011; –; UWA; Cheryl Praeger