



News

General News

CMA Special Year 2012: Inverse Problems

The Special Year Activity for the Centre for Mathematics and its Applications (CMA), MSI, ANU, in 2012 will be Inverse Problems in its broad sense which includes forensic science, information recovery from spectroscopic data, geophysical prospecting, the solution of integral and partial differential equations, regularisation methodology etc.

Throughout 2012, there will be a series of One-Day Seminars (ODS1, 12 April: real world applications; ODS2, 13 April: applications involving mathematical modelling; ODS3, 22 June: theory and applications of methodology for mathematical inverse problems; ODS4, 14 September: statistical aspects of inverse problems) with an international symposium on Regularisation on 19–24 November being the closing formal event. Full details can be found using the following links: www.maths.anu.edu.au/~hegland/sy2012.

No registration fee is involved with attending these One-Day Seminars. However, registration is required to have an estimate of the number attending.

For more details, please check the website.

Completed PhDs

Australian National University

- Dr Roger Senior, *Modular spectral triples and KMS states in noncommutative geometry*.

Deakin University

- Dr Ronghua Tian, *An integrated malware detection and classification system*, supervisor: Lynn Batten.

Macquarie University

- Dr Thomas Peter Arthur Booker, *Structures in and on monoidal categories with a view towards Tannaka duality*, supervisors: Ross Street (Principal), Dominic Verity (Associate).

University of New South Wales

- Dr Ognjen Stancevic, *Escape and metastability in deterministic and random dynamical systems*, supervisor: Gary Froyland.

University of New South Wales, Canberra

- Dr Richard Pennifold, *A nonlinear dynamical analysis of the forced Bonhoeffer Van Der Pol equations*, supervisors: Harvi Sidhu and Geoff Mercer.

University of Melbourne

- Dr Paul Fijn, *Playing with paths: enumerating sets of embellished lattice paths*, supervisors: Richard Brak and Aleks Owczarek.

University of Sydney

- Dr Ian Gregory, *Large scale simulations in mathematical finance, with application to asymptotic statistics, pairs trading and CPPI*, supervisors: Christian-Oliver Ewald and Shelton Peiris.
- Dr Allan Steel, *Construction of ordinary irreducible representations of finite groups*, supervisor: John Cannon.
- Dr Joanna Jia Jia Wang, *Bayesian analysis of stochastic volatility models: modelling and application*, supervisor: Jennifer Chan.
- Dr Justin Koonin, *Topology of eigenspace posets for unitary reflection groups*, supervisor: Gus Lehrer.

University of Western Australia

- Dr Auni Mat Daud, *State estimation and forecasting using a shadowing filter applied to quincunx and ski-slope models*, supervisors: Kevin Judd and Thomas Stemler.
- Dr Melanie Roberts, *The asymptotic analysis of some problems arising in fluid dynamics*, supervisor: Andrew Bassom.

Awards and other achievements

University of New South Wales

Emeritus Prof Colin Rogers was awarded a Visiting Fellowship at Clare Hall, University of Cambridge, for September 2012 until March 2013.

Appointments, departures and promotions

Charles Sturt University

- Dr Azizur Rahman has joined the School of Computing and Mathematics as a Lecturer in Statistics.

La Trobe University

- Katherine Seaton has been promoted to Associate Professor.
- Chris Ormerod has been promoted to Research Fellow.

Macquarie University

- Dr Rishni Ratnam commenced in February in a teaching-only position. Rishni was previously a lecturer at ANU following the completion of his PhD (also at ANU).

Monash University

- Dr Allie Ford has resigned from her duties as Assistant Lecturer. She will be taking up a continuing position of Learning Skills Advisor at the Monash – Peninsula Campus.

Swinburne University of Technology

- Dr Yoni Nazarathy has resigned as Lecturer in Applied Mathematics. He has taken up a position of Lecturer in Statistics at the University of Queensland.

University of Ballarat

- Dr Ning Ruan and Dr Vera Roshchina have joined the School of Science, Information Technology and Engineering as postdoctoral fellows on the Collaborative Research Networks program.
- Associate Professor Andrew Stranieri was recently appointed Director of the Centre for Informatics and Applied Optimization.

University of Melbourne

- Dr Arun Mani and Ms Charlotte McLoughlin have joined the Department.
- Dr Tomasz Kowalski and Dr Jorgen Rasmussen have left the Department.

University of Sydney

- Professor Charlie Macaskill is retiring at the end of July 2012.

University of Western Sydney

- Dr Leanne Rylands was promoted to Associate Professor, effective 1 January 2012.

University of Wollongong

- Associate Professor Adam Rennie has joined the school.
- Dave Robertson has joined the school as a Research Associate.

Conferences and Courses

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

Dendroidal Sets

Date: 11–14 June 2012

Venue: University of Adelaide

Web: www.iga.adelaide.edu.au/workshops/June2012

The Institute for Geometry and its Applications (IGA) will host a Lecture Series by Dr Ittay Weiss (University of the South Pacific) on the topic ‘Dendroidal Sets’.

For more information, please visit the webpage.

CMA Special Year 2012 — Inverse Problems — ODS3

Date: Friday 22 June 2012

Venue: Copland Lecture Theatre, Building 25, ANU

Web: <http://maths-old.anu.edu.au/events/sy2012>

This is the third one-day seminar.

The talks will focus on methodology and theory associated with solving inverse problems. The topics will include various aspects of tomography, scattering theory, photoacoustics, rheological interconversion, sparsity regularization and optimal transport. The speakers will include Neil Trudinger (ANU), Mike Eastwood (ANU), Mark Lukas (Murdoch), David Paganin (Monash), Mike Osborne (ANU) and Brad Treeby (ANU).

Further information will be available on the website including program details once finalised.

No registration fee is involved with attending these one-day seminars. However, registration is required so as to have an estimate of the number attending. If you plan to attend ODS3, please register by emailing admin.research.msi@anu.edu.au and mention ODS3 in the Subject Line.

For more details, please check the website.

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

CTAC2012: 16th Biennial Computational Techniques and Applications Conference

Date: 23–26 September 2012

Venue: Queensland University of Technology, Brisbane

Web: www.ctac2012.qut.edu.au

The Mathematical Sciences School at the Queensland University of Technology (QUT) welcomes you to participate in the 16th Biennial Computational Techniques and Applications Conference (CTAC). CTAC 2012 is a conference on computational mathematics; scientific, technical, and industrial applications; and high-performance computing.

Facilities for conference registration and the submission of abstracts are available now on the CTAC website.

CTAC is organised by the special-interest group in computational techniques and applications of ANZIAM, the Australian and New Zealand Industrial and Applied Mathematics Division of the Australian Mathematical Society. The meetings provide an interactive forum for researchers interested in the development and use of computational methods applied to engineering, scientific and other problems. The CTAC meetings have been taking place biennially since 1981, the most recent being held in 2010 at the School of Mathematics and Statistics, University of New South Wales.

Plenary speakers include:

- Alain Goriely (to be confirmed), Mathematical Institute, Oxford University
- Richard Tsai, Institute for Computational Engineering and Sciences, The University of Texas
- Peter Bartlett, Mathematical Sciences School, Queensland University of Technology
- Markus Hegland, Centre for Mathematics and its Applications, Mathematical Sciences Institute, Australian National University
- Valeria Simoncini, Department of Mathematics, Universita di Bologna
- Stephen Wright, Computer Sciences Department, University of Wisconsin

Important dates to note:

- Early-bird registration closing date: 31 July 2012
- The deadline for abstract submission: 16 July 2012

For more information, please contact the Conference Chair: email: ctac@qut.edu.au; phone: +61 7 3138 2857.

Australian Mathematical Society 56th Annual Meeting

Date: 24–27 September 2012

Venue: University of Ballarat

Web: www.ballarat.edu.au/austms2012

Registration for the Society's annual conference is now open.

ANZAMP inaugural annual meeting

Date: 2–5 December 2012

Venue: Lorne, Victoria

Web: www.anzamp.austms.org.au/meetings/2012

Contact: anzamp.meeting@gmail.com

The Australian and New Zealand Association of Mathematical Physics will hold its inaugural annual meeting in the seaside town of Lorne, Victoria. Registration for this meeting is now open via the conference website. ANZAMP aims to attract a broad audience; the keynote speakers of the inaugural meeting are:

- Debra Bernhardt, University of Queensland
- Paul Fendley, University of Virginia, Charlottesville
- Jarmo Hietarinta, University of Turku
- Andrei Okounkov, Columbia University, New York
- Todd Oliynyk, Monash University
- Arkady Tseytlin, Imperial College, London.

For more information, contact Jan de Gier (Director, office@anzamp.austms.org.au) or Kerry Hill (anzamp.meeting@gmail.com).

The 36th Australasian Conference on Combinatorial Mathematics and Combinatorial Computing (36ACCMCC)

Date: 10–14 December 2012

Venue: University of New South Wales, Sydney

Web: <http://conferences.science.unsw.edu.au/36acmcc>

MODSIM2013: International Congress on Modelling and Simulation

Date: 1–6 December 2013

Venue: Adelaide Convention Centre, South Australia

Web: <http://mssanz.org.au/modsim2013>

Early notice of this congress is being given to enable interested members to lock the dates in their diaries.

The theme for this MODSIM2013 event will be 'Adapting to Change: the Multiple Roles of Modelling'.

Convenors: Professor J. Boland (University of South Australia) and Dr J. Piantadosi (University of South Australia)

Program chairs: Professor R.S. Anderssen (CSIRO Mathematics, Informatics and Statistics) and Dr J. Piantadosi (University of South Australia)

Further details of the conference will be available later in the year.

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
- Dr Tarje Bagheer; University of Copenhagen, Denmark; 14 February 2012 to 13 February 2013; –; UMB; Craig Westerland
- Prof Geoffrey Campbell; La Trobe University; 1 April 2012 to 30 March 2013; –; ANU; –
- Prof Jon Carlson; University of Georgia; 29 March to 23 June 2012; MAGMA; USN; John Cannon
- Prof Brad Gibson; University of Central Lancashire, UK; 20 December 2011 to 4 September 2012; chemical evolution of the galaxy; MNU; John Lattanzio
- Karolina Korvasova; Utrecht University, The Netherlands; 31 August 2011 to 31 July 2012; –; UMB; Kerry Landman
- Joe Lakey; New Mexico State University; 14 May to 5 June 2012; –; UNC; –
- Doctor Davide La Torre; University of Milano; 8 April 2012 to 12 May 2012; –; ANU; –
- Dr Anthony W. Lin; University of Oxford, UK; 21 April to 27 May 2012; –; UMB; Sanming Zhou
- Prof C.C. Lindner; Auburn University, USA; 10–27 July 2012; combinatorial designs; UQ; Elizabeth Billington
- Prof Weidong Liu; Shanghai Jiao Tong University; 15–30 August 2012; non-linear cointegration models; USN; Qiyang Wang
- Prof Klaus Lux; University of Arizona; 1 November to 15 December 2012; –; UWA; Alice Niemeyer
- Prof Hiroyuki Kashima; Aoyama Gakuin University, Japan; 1 April 2012 to 31 March 2013; –; UMB; Peter Hall
- 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 David Mason; University of the Witwatersrand, South Africa; 29 April to 30 June 2012; –; UWA; –
- Prof Pierre Milman; –; 1 May to 1 July 2012; singularity; USN; Laurentiu Paunescu
- Dr Mihai Mihailescu; University of Craiova; 1 August to 30 November 2012; partial differential equations; USN; Florica Cirstea

- Prof Evgeny Mukhin; Purdue University; 5 May to 5 June 2012; algebra; USN; Alexander Molev
- Dr Kok Haur Ng; University of Malaya; 3–14 May 2012; statistics; USN; Shelton Peiris
- Dr Steve Noble; Brunel University, London; 16 April to 12 May 2012; –; UWA; –
- Dr Stefan Papadima; Institute of Maths, Romanian Academy; 1 December 2012 to 31 January 2013; singularity theory; USN; Laurentiu Paunescu
- Xiao-Long Peng; Shanghai University; July 2012 to June 2013; –; UWA; –
- Katja Sagershnik; University of Vienna; 1 May 2011 to 31 December 2012; –; ANU; Michael Eastwood
- 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
- Prof Alexandru Suciu; Northeastern University; 1 November to 15 December 2012; pure; USN; Laurentiu Paunescu
- Xiaoran Sun; Harbin Institute of Technology; October 2012 to September 2013; –; UWA; –
- Dr Jerome Vetois; University of Nice; 16 May to 13 June 2012; PDE; USN; Florica Cirstea
- Remy Vincent; INPG Phelma, Paris, France; 1 March to 31 July 2012; –; UMB; Pierre-Olivier Amblard
- Prof W.D. Wallis; Southern Illinois University at Carbondale, USA; 21–25 May 2012; combinatorics; UQ; Elizabeth Billington
- Dr Yuguang Zhang; Capital Normal University; 21 June to 1 July 2012; geometry; USN; Zhou Zhang
- Mr Chunguang Xia; University of Science and Technology, China; 1 November 2010 to 31 October 2012; algebra and representation theory; USN; Ruibin Zhang
- Prof Xi'an Xu; Xuzhou Normal University, China; 20 November 2011 to 20 November 2012; nonlinear PDE; UNE; Yihong Du
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