The CSIRO–ANZIAM student support scheme

To encourage students to attend conferences relevant to their interests, to emphasise the importance of students giving presentations about their work and to provide a first step educating students in ways of obtaining funding to help their research efforts, CSIRO and ANZIAM have initiated a student support scheme to provide funding to support conference travel and registration for students studying at universities in Australia and New Zealand, who wish to attend the ANZIAM conference or those of the ANZIAM special interest groups.

To be eligible, students will be required to present a talk at the conference and to be members of ANZIAM at the time of making their application. Funding will be at the discretion of the administering panel. For more details on the scheme and the application procedure see http://www.anziam.org.au/The+CSIRO-ANZIAM+Student+Support+Scheme

Applications for this round for attendance at ANZIAM 2009 close on 19 December 2008.

Fermat Prize for mathematics research

The Fermat Prize rewards research works in fields where the contributions of Pierre de Fermat have been decisive:

- statements of variational principles;
- foundations of probability and analytical geometry;
- number theory.

The spirit of the Prize is focused on rewarding the results of researches accessible to the greatest number of professional mathematicians within these fields.

The amount of the Fermat Prize has been fixed at 20000 Euros. The Fermat Prize is awarded once every two years in Toulouse; the tenth award will be announced in October 2009.


Rules governing the award, candidacy formalities, etc. are available from the organising secretariat of the Fermat Prize: Prix Fermat de Recherche en Mathématiques, Service Relations Publiques, Université Paul Sabatier, 31062 Toulouse Cedex 9, France, or on the web at http://www.math.ups-tlse.fr/Fermat/.

Closing date for application forms is 30 June 2009.
La Trobe University

Brian Davey has taken over from Peter Stacey as local correspondent. The editors of the Gazette thank Peter for his time as correspondent.

National curriculum for mathematics

The proposed national curriculum for mathematics has been discussed in the national press in recent days. If you wish to read more, see the discussion papers at http://www.ncb.org.au/consultation/expressions_of_interest/national_forums.html. Click on the ‘Get involved’ heading to obtain directions for receiving notifications of updates to the site.

University of New South Wales

As mentioned in the last issue of the Gazette, the University of New South Wales Schools Mathematics Competition took place on 25 June this year. The winners have just been announced:

**Competition Winners: Senior Division**

Equal First Prize: Paul Cheung, Sydney Technical High School; Giles Gardam, Hurlstone Agricultural High School; Max Menzies, Sydney Grammar School.

Equal Second Prize: Sen Lin, James Ruse Agricultural High School; Irene Lo, James Ruse Agricultural High School.

Third Prize: Kevin Pan, James Ruse Agricultural High School.

**Competition Winners: Junior Division**

Equal First Prize: Raveen Daminha DeSilva, James Ruse Agricultural High School; Sampson Wong, James Ruse Agricultural High School.

Second Prize: Stacey Law, James Ruse Agricultural High School.

Equal Third Prize: Amelia Chowdhury, James Ruse Agricultural High School; Nancy Fu, Pymble Ladies’ College; John Peter Wormell, Sydney Boys High School; Alan Xian, James Ruse Agricultural High School; Yi Zhang, James Ruse Agricultural High School.

University of Southern Queensland

The editors of the Gazette thank Dr Sergey Suslov for his time as local correspondent. Sergey is leaving to take up a position at Swinburne University of Technology in November.
Completed PhDs

University of Adelaide
- Dr Selma Belen, *The behaviour of stochastic rumours*, supervisors: Charles Pearce, Tim Langtry.
- Dr David Butler, *Quadrals and their associated subspaces*, supervisor: Sue Barwick.

University of Melbourne

University of New South Wales
- Dr Danesh Jogia, *Algebraic aspects of integrability and reversibility in maps*, supervisor: John Roberts.

Awards and other achievements

Monash University
- Dr Simon Campbell won the 2008 Charlene Heisler Prize. The prize is awarded annually by the Astronomical Society of Australia for the most outstanding PhD thesis in astronomy or a closely related field. His thesis is entitled *Structural and nucleosynthetic evolution of metal-poor and metal-free low and intermediate mass stars*. Congratulations to Simon, and to his supervisor, Professor John Lattanzio.
- Dr Ian Wanless won a Young Tall Poppy Award.
- Congratulations to Professor Christian Jakob upon becoming a member of one of the Executive Council Task Teams in the World Meteorological Organization to devise a strategy for research into advanced weather and climate prediction.

University of Southern Queensland
- Dr Dmitry Strunin (together with Professor Tony Roberts, formerly USQ and now at the University of Adelaide), have been awarded an ARC Discovery Grant for the project ‘Effective and accurate model dynamics, deterministic and stochastic, across multiple space and time scales’, to the value of $315,000.
University of Sydney
• Neil Saunders has been awarded the Gordon Preston Prize for the best presentation given at the Victorian Algebra Conference by a current student based at an Australian university.

Appointments, departures and promotions

Flinders University
• Associate Professor Raj Huilgol has been promoted to Professor as from 1 July 2008.

La Trobe University
• From 1 August, James Atkinson has taken up a six-month post-doctoral position at the Department of Mathematics and Statistics. He will be working with Professor Reinout Quispel in the dynamical systems research group.

Monash University
• Dr Laura Davies commenced on 20 May 2008. Laura is a new Postdoctoral fellow working with Professor Christian Jakob in the Climate Group.
• Dr Richard Stancliffe, Research Fellow, commenced on 1 July 2008. His research interests are stellar evolution and nucleosynthesis, including binary stars and population synthesis.
• Dr John Mansour, Research Fellow, commenced on 21 July 2008. His research interests are applied mathematics, with particular interest in computational techniques for fluid dynamics.
• Dr Tianhai Tian, Senior Research Fellow, commenced on 11 August 2008. His area of research is in stochastic and multiscale modelling of biological systems, including genetic regulatory networks and cell signalling transduction pathways, stochastic simulation of biochemical reaction systems, computation in financial mathematics, numerical methods for stochastic differential equations, inference methods for estimating model parameters and parallel computing.
• Dr Christian Rau commenced on 1 September 2008 as a Lecturer. His areas of research are in multivariate analysis and statistics on manifolds, spatial statistics and geostatistics and stochastic geometry and image analysis.
• Dr Daniel Price commenced on 1 September 2008 as a Monash Fellow. His areas of research are broadly computational astrophysics: magnetohydrodynamics, self-gravitating gas dynamics and the smoothed particle hydrodynamics method.

Murdoch University
• Associate Professor Ken Harrison has retired after 32 years at Murdoch. He has been appointed Emeritus Associate Professor.
University of Melbourne

- Dr Maozai Tian has been appointed as Research Fellow.
- Dr David Wood has been appointed as QEII Fellow.
- Mr John Baldock has been appointed as MASCOS Network Administrator.
- Associate Professor William Blyth has been appointed as AMSI Research Fellow.
- Dr Gary Iliev has been appointed as MASCOS Research Fellow.
- Dr Jinghao Xue has been appointed as Research Fellow.

University of New England

- Dr Bea Bleile resumed as Associate Lecturer and Dr Imre Bokor resumed as Lecturer in September 2008.

University of New South Wales

- Dr Mohammad Akbar (from the University of Alberta) and Dr Rika Hagihara (from College of William and Mary) have begun working as postdoctoral fellows with Tony Dooley.
- Professor Fedor Sukochev has joined UNSW from Flinders University.

University of Queensland

- Dr Iadine Chades joins the Mathematics Department from the Institut National de la Recherche Agronomique (Toulouse). She has a 12-month appointment from July 2008 as Research Fellow working with Hugh Possingham and Phil Pollett on a project titled Strategies for managing invasive species in space: deciding whether to eradicate, contain or control, which is partially funded by ACERA, MASCOS and AEDA. She has research interests in mathematical modelling and decision making in ecology.
- Dr Ross McVinish joins the Mathematics Department from QUT and has a three-year appointment as Research Fellow from September 2008 working with Phil Pollett. Ross has research experience in a number of areas of probability and statistics, from Lévy processes and stochastic processes displaying long memory, to Bayesian nonparametrics, and computation for Bayesian statistics and time series analysis.

University of Southern Queensland

- The Department of Mathematics and Computing has lost more staff than required through voluntary separation and resignation and will seek to advertise positions in mathematics and statistics shortly.

University of Sydney

- Dr William Bertram has resigned from his position as Lecturer in financial mathematics.
- Dr Georg Gottwald has been promoted to Principal Research Fellow/Associate Professor.
University of Western Australia
- Dr Tsoy-Wo Ma has taken up an Honorary Senior Lecturer position.
- Dr Csaba Schneider commenced six months as Research Fellow on a G08 European Fellowship.
- Dr Christian Thomas commenced as Research Associate.

New Books

Monash University

Murdoch University

University of New England

Conferences and Courses

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

Algebras, Operators and Noncommutative Geometry
Date: 1–5 December 2008
Venue: Centre for Mathematics and its Applications, ANU
Web: http://wwwmaths.anu.edu.au/events/aong08/

UNSW Research Workshop: Function Spaces and Applications
Date: 2–6 December 2008
Venue: University of New South Wales, Sydney

The workshop is intended to bring together engineers and mathematicians to exchange problems, solutions and ideas and to foster both interdisciplinary and inter-disciplinary research and collaboration. The focus of the workshop is on function spaces and their applications in the wide sense, including: functional and harmonic analysis and PDE; image and signal processing; Besov, Lizorkin–Triebel and Sobolev spaces; optimal computation problems, algorithms and complexity; functional calculus and vector-valued functions; wavelets, splines and stochastic models.
TRANSITIONS: a one-day workshop on mathematical curriculum issues in the transition from school to university

Date: 3 December 2008
Location: La Trobe University, Bundoora campus

7th Australia–New Zealand Mathematics Convention (ANZMC2008)

Date: 8–12 December 2008
Venue: Christchurch, New Zealand
Web: http://www.math.canterbury.ac.nz/ANZMC2008/

4ICC (4th International Conference on Combinatorial Mathematics and Combinatorial Computing)

Date: 15–19 December 2008
Venue: Auckland, New Zealand
Web: http://www.cs.auckland.ac.nz/research/groups/theory/4ICC/

Special theme program on group theory, combinatorics and computation

Date: 5–16 January 2009
Venue: The University of Western Australia, Perth
Web: http://sponsored.uwa.edu.au/gcc09/
Email: gcc09@maths.uwa.edu.au

2009 AMSI Summer School

Date: 12 January to 6 February 2009
Venue: University of Wollongong

The AMSI Summer School is designed for Honours and coursework masters students in mathematical and statistical sciences. Courses will be available in the areas of applied mathematics, pure mathematics and statistics. The annual Mathematics in Industry Study Group will be held at Wollongong 27–31 January 2009 and this has been incorporated into one of the courses.

More details, including a registration form and subsidy information, are available on the website. The deadline for registration is 21 November 2008.

AMSI is funded by the Australian Government Department of Education, Employment and Workplace Relations and we thank them for their support.


Date: 20–23 January 2009
Venue: Victoria University of Wellington, New Zealand
Web: http://velorum.ballarat.edu.au/~pmanyem/CATS09
Celebrating Bob Anderssen’s 70th birthday: ANU/CSIRO one-day seminar on computational mathematics and inverse problems

Date: 23 January 2009
Venue: ANU Manning Clarke Lecture Theatre 6 and Foyer, ANU
Web: http://wwwmaths.anu.edu.au/events/Bob70

Bob Anderssen has applied mathematics to a very broad range of problems ranging from the vibrations of the earth to the formation of patterns in plants. Two themes that have been threads that draw together much of this work are the application of computational mathematics and the analysis of inverse problems. This meeting, which focuses on computational mathematics and inverse problems and features speakers who have collaborated with Bob, will attempt to capture the diversity of his work in these areas.

Organising committee: Frank de Hoog, CSIRO; Markus Hegland, Australian National University.

There is no registration fee for attendance and everyone with an interest in mathematical modelling, computation and inverse problems, and friends of Bob are most welcome to attend. However, in order for us to arrange catering, please register through the website.

ANZIAM 2009

Date: 1–5 February 2009
Venue: Rydges Oasis Resort, Caloundra, Queensland

We have added to our list of invited speakers. The list now reads: Prof Jim Hill (Wollongong, ANZIAM Medalist, 2008); Prof Ian Turner (QUT); Prof Kerrie Mengersen (QUT); Prof Phillip Maini (Oxford); Dr Graham Weir (Industrial Research Limited, NZ); Prof Guy Latouche (Bruxelles); Prof Natashia Boland (Newcastle); Prof Jerzy Filar (University of South Australia).

The closing date for registration and abstract submission is 19 December 2008.

HDA09: 3rd workshop on high-dimensional approximation

Date: 16–20 February 2009
Venue: School of Mathematics and Statistics, University of New South Wales
Web: http://conferences.science.unsw.edu.au/hda09/

Workshop on complex geometry

Date: 16–20 February 2009
Venue: Institute for Geometry and its Applications, University of Adelaide

Speakers (as of mid September): Nicholas Buchdahl, University of Adelaide; Emma Carberry, University of Sydney; Jean-Pierre Demailly*, Université de Grenoble;
Michael Eastwood, University of Adelaide; Peter Ebenfelt*, University of California, San Diego; Vladimir Ejov, University of South Australia; John Erik Forness, University of Michigan; Franc Forstneric*, University of Ljubljana; Rod Gover, University of Auckland; Adam Harris, University of New England; Alexander Isaev, Australian National University; Kang-Tae Kim, Pohang University of Science and Technology; Finnur Larusson, University of Adelaide; Jurgen Leitner, Humboldt-Universitat; Morris Kalka, Tulane University; Amnon Neeman*, Australian National University; Paul Norbury, University of Melbourne; Gerd Schmalz, University of New England. (*Keynote speakers will give 2-3 lectures each, the first lecture being a survey intended for a broad audience.)

There is no formal registration process or fee, but please let us know if you plan to attend the workshop.

For more information, please contact one of the organisers: Nicholas Buchdahl, Michael Eastwood or Finnur Larusson at firstname.lastname@adelaide.edu.au.

The workshop is supported by AMSI.

**Australia–Latin America Mining Summit 2009**

**Date:** 23–27 February 2009  
**Venue:** University of New South Wales  
**Web:** http://www.complex.org.au/events.php

**International workshop on modelling and data analysis for infectious disease control**

**Date:** 9–12 March 2009  
**Venue:** Murramarang, NSW  

The workshop title reflects the major theme, which includes assessment of vaccine effects, vaccination strategies, effectiveness of antiviral drugs, non-pharmaceutical interventions and methods to estimate the parameters and functions that inform these.

Interested persons are asked to complete an expression of interest and fax it to +61 2 6125 0740.

For program information, contact Niels Becker + 61 2 6125 4578. For practical information, contact Ros Hales +61 2 6125 5627.

**NSDS09**

**Date:** 22–27 June 2009  
**Venue:** Sevilla, Spain  
**Web:** http://congreso.us.es/nsds09
On the occasion of Peter Kloeden’s 60th birthday, the International Conference on Non-autonomous and Stochastic Dynamical Systems and Multidisciplinary Applications (NSDS09) is being held in Sevilla (Spain) on 22–27 June 2009.

This conference aims to be a second edition of the NSDS05 which was held in Sevilla in 2005 (http://grupo.us.es/gaesdif/nsds05), and is also closely related to the conferences held in 2002 (http://wmatem.eis.uva.es/~dmde02/) and in 2007 (http://wmatem.eis.uva.es/~dm07/).

1st PRIMA Congress
Date: 6–10 July 2009
Venue: University of New South Wales, Sydney
Web: http://www.primath.org/prima2009
Contact: Alejandro Adem (adem@pims.math.ca)
   Local Arrangements Committee (prima2009@maths.unsw.edu.au)

PRIMA (Pacific Rim Mathematical Association) is an association of mathematical sciences institutes, departments and societies from around the Pacific Rim. It was established in 2005 to promote and facilitate the development of the mathematical sciences throughout the Pacific Rim region. PRIMA aims to hold an international congress every four years.

As well as plenary addresses by leading international speakers there will be a range of special sessions on topics reflecting the breadth and diversity of research in the mathematical sciences across the region.

Third Japanese/Australian workshop on real and complex singularities
Date: 15-18 September 2009
Venue: The University of Sydney (Medical Foundation Auditorium)
Web: http://www.maths.usyd.edu.au:8000/u/laurent/RCSW

The first two Australian–Japanese Workshops on Real and Complex Singularities were held in Sydney in September 2005 and in Kyoto in November 2007. The third workshop will be held in Sydney in September 2009. All interested mathematicians are welcome to attend.

Vale

University of Sydney

It is with deep regret and sadness that the School of Mathematics and Statistics announces the sudden death of Dr Marc Raimondo, Senior Lecturer in Statistics, on 10 August 2008.
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 Florent Autin; Université Paris 7; 15 October 2008 to 15 December 2008; maxisets; USN; M. Raimondo
Prof Rosemary Bailey; University of London; 22 to 30 November 2008 and 7 to 20 December 2008; design of experiments; USA; Dr Chris Brien
Prof Thomas Bartsch; Giessen; 1 October 2008 to 15 November 2008; topological methods in nonlinear analysis; USN; E.N. Dancer
Prof Dorin Bucur; Universite de Savoie; 1 October 2008 to 30 November 2008; boundary value problems for partial differential equations; USN; E.N. Dancer
Prof Alain Bruguieres; University of Montpellier II; 1 November 2008 to 10 December 2008; Hopf algebras and category theory; MQU; Em/Prof Ross Street
Prof Dorin Bucur; Universite de Savoie; 1 October 2008 to 30 November 2008; boundary value problems for partial differential equations; USN; E.N. Dancer
Dr Nirmalendu Chaudhuri; University of Wollongong; 1 July 2008 to 31 December 2008; applied and nonlinear analysis; ANU; Neil Trudinger
Dr Florica Cirstea; University of Sydney; 14 July 2008 to 14 July 2011; applied and nonlinear analysis; ANU; Neil Trudinger
Prof David Clark: SUNY, New Platz, NY, USA; 15 October 2008 to 15 December 2008; universal algebra; LTU; Drs Brian A. Davey.
(Note: Professor Clark will be visiting the Research Group on General Algebra and its Applications and will be a Distinguished Fellow at La Trobe’s Institute for Advanced Study for two months.)
Dr Robert Clark; University of Wollongong; 1 July 2008 to 1 July 2011; statistical science; ANU; Alan Welsh
Professor Garth Dales; University of Leeds; 2 to 24 October 2008; analysis and geometry; ANU; Rick Loy
Prof Gauri Datta; University of Georgia; 5 September to 5 November 2008; UMB; Prof Richard Huggins
Prof Zengji Du; School of Mathematical Sciences, Xuzhou Normal University; 22 October 2008 to 22 October 2009; differential equations; Chris Tisdell
Mr Ivan Dynov; Max-Planck Institut für Mathematik; 1 September 2008 to 31 December 2008; analysis and geometry; ANU; Alan Carey
Prof Ahmad Erfanian; University of Mashland, Iran; May to December 2008; UWA; Prof Cheryl Praeger
Em/Prof Christopher Field; Dalhousie University; 7 November 2008 to 3 December 2008; asymptotic methods in statistics; USN; J. Robinson
Prof Fereidoun Ghahramani; University of Manitoba; 10 November 2008 to 1 January 2009; analysis and geometry; ANU; Rick Loy
Professor Philip Griffin; Syracuse University; 1 February 2009 to 21 March 2009; financial mathematics; ANU; Ross Maller
Professor Hong Gu; Dalhousie University; 18 January 2009 to 28 February 2009; statistical science; ANU; Alan Welsh
Prof Zongming Guo; Henan Normal University; 31 August 2008 to 15 November 2008; large solutions of nonlinear elliptic partial differential equations; USN; E.N. Dancer
Prof Chong Chao Huang; Wuhan University, China; June 2008 to January 2009; --; UWA; A/Prof Song Wang
Dr Alexey Isaev; Bogoliubov Laboratory of Theoretical Physics, Russia; 1 October 2008 to 1 December 2008; quantum algebras, their symmetries, invariants and representations; USN; A.I. Molev
Dr Philip Kokic; ABARE; 8 July 2008 to 7 July 2009; statistical science; ANU; Alan Welsh
Dr Jacek Krawczyk; Victoria University of Wellington, New Zealand; 1 September 2008 to 7 November 2008; economic and environmental applications of control theory and dynamical systems; USA; Prof Jerzy Filar
Prof Tony Krzesinski; University of Stellenbosch, South Africa; 21 November 2008 to 23 December 2008; --; UWA; Prof Peter Taylor
Dr Philippe Lauret; University of La Reunion, Reunion Island; 8 August 2008 to 9 February 2009; mathematical and statistical modeling of energy systems; USA; A/Prof John Boland
Prof Charles Leedham-Green; Queen Mary and Westfield College; 30 December 2008 to 17 January 2009; --; UWA; Dr Alice Niemeyer
Prof Michael Leinert; University of Heidelberg; 30 October 2008 to 8 March 2009; harmonic analysis and Banach algebras; UNSW; Ian Doust
Prof Michael Leinert; University of Heidelberg; 1–28 December 2008; harmonic analysis; MDU; Prof Walter Bloom
Ms Nan Li; The Sichuan Normal University, China; 1 February 2008 to 31 January 2009; --; UWA; A/Prof Song Wang
Dr Martin Markl; Institute of Mathematics of the Academy of Sciences of the Czech Republic; 18 November 2008 to 15 December 2008; higher category theory; MQU; Dr Michael Batanin
Dr James McCoy; University of Wollongong; 1 January 2009 to 30 June 2009; applied and nonlinear analysis; ANU; Ben Andrews
Professor William Messing; University of Minnesota; 20 September 2008 to 29 October 2008; algebra and topology; ANU; Amnon Neeman
Dr Christine Mueller; University of Kassel, Germany; 1 October 2008 to 31 December 2008; --; UMB; Prof Richard Huggins
Dr Gernot Mueller; University of Technology, Munich; 25 October 2008 to 26 December 2008; financial mathematics; ANU; Ross Maller
Dr Alireza Nematollahi; University of Shiraz; 15 December 2007 to 15 December 2008; multivariate analysis and time series; USN; N.C. Weber
Prof Shuangjie Peng; Central China Normal University; 15 June 2008 to 31 January 2009; nonlinear elliptic partial differential equations; USN; E.N. Dancer
Prof Helen Perk; Oklahoma State University; 1 August 2008 to 31 May 2009; mathematical physics; ANU; Murray Batchelor
Prof Jacques Perk; Oklahoma State University; 1 August 2008 to 31 May 2009; mathematical physics; ANU; Murray Batchelor
Prof Ulf Persson; Chalmers University; 1 November 2008 to 31 December 2008; algebra and topology; ANU; Amnon Neeman
Dr Pierre Portal; University of Lille; 23 February 2009 to 6 April 2009; analysis and geometry; ANU; Alan McIntosh
Prof. Sebastian Reich; University of Potsdam; 1 October 2008 to 12 December 2008; Multi-scale methods in science and engineering; USN; G. Gottwald
Alan Professor Steve Rosenberg; Boston University; 1 March 2009 to 1 July 2009; analysis and geometry; ANU; Alan Carey McIntosh
Dr Jerome Scherer; Universitat Autonoma de Barcelona; 3 September 2008 to 15 December 2008; algebra and topology; ANU; Amnon Neeman
Dr Qiao Shouhong; Sun Yat-sen University, China; 1 March 2008 to March 2009; –; UWA; A/Prof Cai Heng Li
Maryam Solary; Guilan University, Iran; July 2008 to January 2009; –; UWA; A/Prof Song Wang
Dr Damien Stehle; Ecole Normale Superieure, Lyon; 19 July 2008 to 18 July 2009; computational aspects of lattices; USN; J.J. Cannon
Prof Ralph Stohr; University of Manchester; 21 September 2008 to 10 December 2008; algebra and topology; ANU; Laci Kovacs
Prof Alexis Virelizier; University of Montpellier II; 1 November 2008 to 10 December 2008; Hopf algebras and category theory; MQU; Em/Prof Ross Street
Dr Huoxiong Wu; Xiamen University, China; January 2008 to November 2008; harmonic analysis and partial differential equations; MQU; X.T. Duong
Professor Chengmin Zhang; Chinese Academy of Science; 15 November 2008 to 15 December 2008; astronomy and astrophysics; ANU; Lilia Ferrario