



## Completed PhDs

### Queensland University of Technology:

- Recent PhD completions include Paula Denman, Therese Wilson and Jonathan Johansen.

### University of Western Australia:

- Simon Collings, *Frontier points: theory and methods for computer vision*, supervisor: Professor Lyle Noakes (jointly supervised with Computer Science)
- Tomasz Popiel, *Geometrically-defined curves in Riemannian manifolds*, supervisor: Professor Lyle Noakes
- Munzir Said, *Computational optimal control modelling and smoothing for biomechanical systems*, supervisor: A/Professor Leslie Jennings

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## Appointments, departures and promotions

### Flinders University:

- Dr Ray Booth, Dr Theresa Dodds, Professor Peter Dodds, Professor Gopal Gopalsamy and Dr Ananth Rao, mathematicians, have all accepted a voluntary separation from the University as from 31 July 2007. That represents a grand total of approximately 166 years of continuing academic (teaching and research) employment at Flinders. There are three mathematicians remaining as full-time staff at Flinders and it is anticipated that one or two further positions may be created in the near future.

### La Trobe University:

- Lennaert van Veen has left to take up a position in Concordia University, Montreal.

### Swinburne University of Technology:

- Dr Tristan Barnett has been appointed Adjunct Research Fellow. Dr Barnett's research focuses on modelling and statistical analysis in tennis.

### University of South Australia:

- Dr Bronwyn Hajek has been appointed as a Research Associate in Mathematical Modelling.
- Dr Ming-Lu Wu has been appointed as a Lecturer in Financial Mathematics.

### University of Southern Queensland:

- Dr Richard Watson has taken over from Associate Professor Ron Addie as Head of the Department of Mathematics and Computing.

### University of Sydney:

- Dr Nigel O'Brian retired on 23 July.
- Dr William Bertram has been appointed as lecturer.

## Awards and other achievements

### LaTrobe University

- Grant Cairns, of LaTrobe University, has won a Carrick Citation for Outstanding Contributions to Student Learning.

### Honourable Mention for USQ students in Mathematical Contest in Modelling

The USQ undergraduate mathematics and science student team including Adam Blazak, Bernard Stilgoe and Denis O'Sullivan, under the supervision of Dr Sergey Suslov, continued a long-term USQ tradition and participated in the 2007 Mathematical Contest in Modelling. This competition is organized annually by the Consortium for Mathematics and its Applications, an award-winning non-profit organisation whose mission is to improve mathematics education for students of all ages.



From left: Denis O'Sullivan, Bernard Stilgoe and Adam Blazak were supervised by Sergey Suslov

949 teams from 12 countries participated in the contest this year. The USQ team, the only team from Australia, was awarded an Honourable Mention. Overall competition statistics were: 14 Outstanding Winners (1%); 122 Meritorious Winners (13%); 255 Honorable Mentions (27%); 558 Successful Participants (59%).

Congratulation to the USQ team for achieving a ranking in the top 30% of all participants!

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## Conferences and Courses

### Call for abstracts: Bioinformatics Australia 2007

Participants are invited to submit abstracts for oral and poster presentations for the Bioinformatics Australia 2007 conference. Oral presentations are sought for the following five symposium areas: Computational Biology, Methods and Tools in Bioinformatics, Proteomics and Structural Bioinformatics, Biological Systems and Comparative Genomics and Evolution. Two speakers for each symposium will be selected from submitted abstracts. Poster presentations are sought for all bioinformatics-related topics. Early career researchers and students are strongly encouraged to participate.

All participants need to be registered by 24 September 2007 to be included in the conference proceedings.

Please see the conference website for details about submission of abstracts.

Closing date for receipt of abstracts:

Oral presentations: 14th September 2007

Poster presentations: 24th September 2007

Web: <https://www.ausbiotech.org/bioinformaticsaustralia2007>

### Logic Summer School

An Open Invitation to attend the Logic Summer School, The Australian National University, 3 to 14 December 2007.

We call this, 'two weeks of wall-to-wall logic'. The Logic and Computation group at ANU believe that logic is not just about computers, or computer scientists. We say that anything that makes sense can be subjected to logical analysis, which means that this School is attractive to any IT professionals, educators in logic and undergraduate students planning to do research in logic-related fields.

Stijn de Saeger (Japan Advanced Institute of Science and Technology, Summer Scholar in 2007) says:

The Summer School did a very fine job of painting a coherent picture of logic as a field, and how it all hangs together. I never read a text book yet that did that for me, and this is one of the things I valued most about the Summer School.

Courses are taught by some of the world's leading logicians and comprise a blend of practical and theoretical short courses on aspects of pure and applied logic.

This is a unique opportunity to learn more about the field of logic from some of the world's best logicians with state-of-the-art computational science facilities at the ANU.

Presenters: Dr Anbulagan, NICTA; Professor Franz Baader, Technische Universität, Dresden, Germany; Dr Peter Baumgartner, NICTA; Dr Brian Davey, La Trobe University; Dr Rajeev Goré, ANU; Dr Jinbo Huang, NICTA; Dr Tomasz Kowalski, ANU; Dr Jia Meng, NICTA; Emeritus Professor Robert Meyer, Visiting Fellow, ANU; Associate Professor Sophie Pinchinat, Université de Rennes 1, France; Professor John Slaney, ANU/NICTA; Dr Alwen Tiu, ANU.

Is it for you? <http://lss.rsise.anu.edu.au/about>

Program <http://lss.rsise.anu.edu.au/program>

Fees and registration <http://lss.rsise.anu.edu.au/registration>

More information <http://lss.rsise.anu.edu.au>

To discuss this invitation in more detail, including advice on suitable candidacy, please contact Professor John Slaney by email: [John.Slaney@anu.edu.au](mailto:John.Slaney@anu.edu.au)

Read about last year's event: [http://cecs.anu.edu.au/events\\_more?SID=15](http://cecs.anu.edu.au/events_more?SID=15)

The Logic Summer School is supported by The Logic and Computation Program, NICTA and The Research School of Information Sciences and Engineering, ANU.

General enquiries: Email: [lss@mail.rsise.anu.edu.au](mailto:lss@mail.rsise.anu.edu.au); Tel: +61 2 6125 8630; Fax: +61 2 6125 8651.

### **Special Session on University Maths Education, 12–15 December 2007**

We are delighted to announce inclusion of a special session on University Mathematics Education at the 1st Joint Meeting of the American Mathematical Society and NZMS in Wellington in December 2007. Do consider participating. New Zealand is very beautiful at that time of the year!

We're keen to welcome participants with a wide range of specialisations, and build a session of interest to everyone.

There is much to reflect on in the current teaching and learning climate. Sessions are expected to comprise groups of talks that address themes like the following:

- attracting students to the study of mathematics
- maths courses for other professions
- strategies for managing student diversity, at entry level, in particular
  - evolving curricula and assessment
  - effective use of technology for learning mathematics
  - teaching experiments in a range of settings

Your talk should be no longer than 20 minutes duration. Submit an abstract online at <http://atlas-conferences.com/cgi-bin/abstract/submit/catm-01>

If you have any difficulties, contact Tim Passmore at [passmore@usq.edu.au](mailto:passmore@usq.edu.au) Also let Tim know If you need an official letter of invitation for visa purposes.

Register at <http://www.mcs.vuw.ac.nz/~mathmeet/amsnzms2007/>. As the session is organised, details will appear on this conference website, including information on plenaries.

And we look forward to welcoming you!

Special Session Organising Team: Derek Holton (Otago); Bill McCallum (Arizona); Pat Cretchley (University of Southern Queensland); and Tim Passmore (University of Southern Queensland).

### **AAECC-17**

This is a call for papers for 17th Symposium on Applied Algebra, Algebraic Algorithms, and Error Correcting Codes, to be held at the campus of Indian Institute of Science, Bangalore, India, on December 16–20, 2007.

General Chairs: P. Vijay Kumar, Tom Høholdt and Heeralal Janwa.

Technical Program Committee Chairs: Serdar Boztas and Hsiao-feng Lu.

Previously unpublished contributions across a range of topics in applied algebra, error correcting codes, and cryptography are solicited, including: algebra, algebraic computation, codes and algebra, codes and combinatorics, modulation and codes, sequences, and cryptography.

The proceeding will be published in Springer-Verlag's Lecture Notes in Computer Science and will be available at the conference.

Invited speakers: T. Helleseth, R. Koetter, T. Lange, G. McGuire, P. Shankar, and H. Stichtenoth. Also planned is a session on list decoding, organised by Madhu Sudan.

Web: <http://comm.ccu.edu.tw/aaecc17>

### **ANZIAM 2008**

The venue for the ANZIAM conference for 2008 is the Carrington Hotel in Katoomba. Katoomba is situated in the Blue Mountains in New South Wales, about two hours from Sydney by train or car. The conference will run from Sunday 3 February to Thursday 7 February, with the traditional Sunday evening barbecue to start things off.

We are particularly pleased that a very distinguished group of invited speakers have agreed to give talks on their research. Their interests cover a broad spectrum across current areas of applied mathematical research, including dynamical systems, mathematical biology and biomedical modelling, climate research and fluid mechanics. There is also crossover into pure mathematics and theoretical physics through Professor Terence Tao and Professor Sir Michael Berry.

Speakers: Dr Sanjeeva Balasuriya (Connecticut College; J.H. Michell medallist, 2006); Professor Sir Michael Berry (University of Bristol); Professor Matthew England (University of New South Wales); Professor Ben Leimkuhler (University of Edinburgh); Professor Linda Petzold (University of California, San Diego; AMSI Lecturer); Professor Andrew Pullan (University of Auckland); Professor Mick Roberts (Massey University); Dr Yvonne Stokes (University of Adelaide; J.H. Michell medallist, 2007); Professor Terence Tao (University of California, Los Angeles);

Web: <http://www.maths.usyd.edu.au/ANZIAM2008>

or contact Charlie Macaskill ([c.macaskill@maths.usyd.edu.au](mailto:c.macaskill@maths.usyd.edu.au)) or Dave Galloway ([d.galloway@maths.usyd.edu.au](mailto:d.galloway@maths.usyd.edu.au)).

### **New Zealand Institute of Mathematics and its Applications Thematic Programme in Algorithmics, 2008**

In 2008 the six-month program *Algorithms: New Directions and Applications*, funded by the New Zealand Institute of Mathematics and its Applications, will run (for details see <http://www.cs.otago.ac.nz/algorithmics/home/>). The main themes are probabilistic analysis of algorithms, randomized algorithms, approximation algorithms and fixed-parameter complexity, with emphasis on increasing interaction between local and overseas researchers in these areas.

The first event is a meeting to be held at The Crown Hotel in Napier, 18–22 February 2008. We request anyone interested in attending to pre-register as soon as possible at <http://www.cs.otago.ac.nz/algorithmics/activities/fmintreg.html>

Participant numbers are limited to 60. Accommodation in Napier (a seaside city with a population of about 50 000) at that time (summer) is likely to be in short supply. We recommend that accommodation be booked as soon as possible. Possible close-by options are listed on the meeting's website.

The programme will consist of two 50-minute expository talks by each of the invited overseas speakers (including Professor Michael Mitzenmacher (Harvard U.), Professor Dominic Welsh (Oxford U.), Professor Michael Langston (U. Tennessee), and Professor Steve Linton (U. St Andrews)); short (15–20 minute) contributed talks by participants; several group problem sessions. Each problem session will focus on a particular area of algorithmic interest and is aimed at facilitating new collaborative research in New Zealand and between local and overseas researchers.

Please sign up immediately on the above webpage if you are interested.

### **9th World Meeting of the ISBA**

You are warmly invited to the 9th World Meeting of the International Society for Bayesian Analysis (ISBA) to be held at Hamilton Island, Australia, 21–25 July 2008. In the spirit of previous meetings, this conference will offer delegates a programme which embraces many facets of Bayesian Analysis. There will be five keynote speakers, 90 presentations run through three parallel strands and poster evenings. The programme will be combined with lunchtime activities and social events that will allow delegates to explore this truly magnificent location in the heart of Australia's Great Barrier Reef. We look forward to your company.

Web: <http://www.isba2008.sci.qut.edu.au>

E-mail: [isba08@qut.edu.au](mailto:isba08@qut.edu.au)

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### **Visiting mathematicians**

Visitors are listed in the order of the last date of their visit 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 Michael Vaughan-Lee; Christchurch, Oxford; 11 August to 1 September 2007; computational group theory; USN; J.J. Cannon
- Prof Ejaz Ahmed; Statistics, University of Windsor, Canada; approximately 12 August 2007, for three weeks; –; MQU
- Dr Tobias Beck; Austrian Academies of Sciences; 4 August to 2 September 2007; computational algebraic geometry; USN; J.J. Cannon
- Dr Ciprian Coman; University of Glasgow; 25 July to 2 September 2007; –; UWA; Prof Andrew Bassom
- Prof Philip Maini; Center for Mathematical Biology, University of Oxford; 9 Aug to 3 September 2007; –; QUT; –
- Dr Alexander Chervov; Institute for Theoretical and Experimental Physics, Moscow; 23 July to 7 September 2007; quantum groups and their representations; USN; A.I. Molev
- Dr Lassina Dembele; University of Calgary; 16 August to 16 September 2007; modular forms; USN; J.J. Cannon
- Dr Akira Yasuhara; Tokyo Gakugei University; 20 July to 17 September 2007; classical links; USN; J.A. Hillman
- Prof Graeme Segal; All Souls College, Oxford; 29 August to 29 September 2007; cohomology of configuration spaces with coefficients; USN; G.I. Lehrer
- Dr James Parkinson; Cornell University; 4 June to 19 October 2007; buildings and Hecke algebras; USN; D.I. Cartwright
- Mr Mikael Johansson; Mathematisches Institut, Fakultät für Mathematik und Informatik, Jena, Germany; 10 September to 20 October 2007; computational aspects of group cohomology; USN; J.J. Cannon
- Dr Eric Badel; INRA (French National Institute for Agricultural Research): Wood Material Laboratory (LERMAB) – Nancy, France; February to November 2007; –; QUT
- Prof Jiang-Min Pan; University of Yunnan, China; 15 August to 1 November 2007; –; UWA; A/Prof Caiheng Li
- Prof Vyacheslav Futorny; University of San Paolo; 24 September to 3 November 2007; quantum groups and their representations; USN; R. Zhang
- Prof Robert Liebler; Colorado State University, USA; 1 October to 11 November 2007; –; UWA; Prof Cheryl Praeger
- Mr Markus Kirschmer; Lehrstuhl D Fur Mathematik; 20 September to 3 November 2007; computational group theory; USN; J.J. Cannon
- Prof John Phillips; University of Victoria, Canada; 1 October to 30 November 2007; analysis and geometry; ANU; Alan Carey
- Prof Elvezio Ronchetti; University of Geneva; 01 November to 30 November 2007; statistical science; ANU; Alan Welsh
- A/Prof Dimitri Leemans; Universite Libre de Bruxelles; 15 September to 12 December 2007; computational finite geometry; USN; J.J. Cannon
- Prof Pierre Milman; Toronto; 1 to 15 December 2007; algebraic Aspects of Singularities; USN; L. Paunescu
- Dr Andrea Carbonaro; University of Milano; 15 September to 15 December 2007; analysis and geometry; ANU; Alan McIntosh
- Prof Allen Rodrigo; University of Auckland; 8 August to 15 December 2007; Centre for Bioinformation Science; ANU; Sue Wilson
- Prof Guji Tian; Wuhan Institute of Physics and Mathematics; 17 September to 17 December 2007; applied and nonlinear analysis; ANU; Xu-Jia Wang

- Dr Alex Kitaev; Steklov Mathematical Institute; 25 August 2007 to 31 December 2007; singularities and othe properties of integrable systems; USN; N. Joshi
- Prof Alan Huckleberry; Ruhr-Universitat Bochum Institut Fur Mathematik; 25 November to 21 December 2007; analysis and geometry; ANU; Alexander Isaev
- Jan Saxl; Cambridge University; mid-November to December 2007; -; UWA; Cheryl Praeger
- Ms Weiwei Ren; Yunnan University, China; February to Dececeber 2007; -; UWA; A/Prof Caiheng Li
- Mr Mohamad-Reza Mohebbi; Tehran University of Medical Sciences, Iran; 18 March 2007 to 1 February 2008; -; UMB; -
- Dr Tom Ter Elst; University of Auckland; 20 January to 16 February 2008; analysis and geometry; ANU; Alan McIntosh
- A/Prof Andrea Previtali; University of Insubria-Como; 1 October 2007 to 28 February 2008; computational Group Theory; USN; J.J. Cannon
- Dr M. Iranmanesh; Yazd University, Iran; 10 June 2007 to 10 March 2008; -; UWA; Prof Cheryl Praeger
- Dr Tim Burness; University of Southampton; 21 January to 21 March 2008; -; UWA; Prof Cheryl Praeger
- Prof Philip Griffin; Syracuse University; 01 February to 30 April 2008; Centre for Financial Mathematics; ANU; Alan Welsh
- Dr Youyun Li; Hunan Changsha University; 1 May 2006 to 1 May 2008; -; UWA; A/Prof Song Wang
- Dominic Schuhmacher; University of Zurich; 1 April 2006 to 31 May 2008; -; UWA; Prof Adrian Baddeley
- Dr Ashraf Daneshkhah; Bu-Ali Sina University; 3 September 2007 to June 2008; -; UWA; Prof Cheryl Praeger
- Prof Alireza Ematollahi; Shiraz University; 15 September 2007 to 15 September 2008; -; ANU; Alan Welsh
- Prof David Gubbins; Leeds; 20 September 2007 to 19 September 2008; magneto-hydrodynamic dynamo theory and the geodynamo; USN; D.J. Ivers
- Dr Frederic Robert; Université de Nice; 14 November 2007 to 03 November 2008; applied and nonlinear analysis; ANU; Florica Cirstea
- Dr Alireza Nematollani; University of Shiraz; 15 December 2007 to 15 December 2008; multivariate analysis and time series; USN; N.C. Weber