

#### Completed PhDs

#### University of Adelaide:

- Dr Nectarios Kontoleon, *The Markovian binary tree: a model of the macroevolutionary process*, supervisors: N. Bean and P.Taylor.
- Dr Amy Glen, On sturmian and episturmian words and related topic, supervisors: A. Wolff and R. Clarke.
- Dr Mark McDonnell, Theoretical aspects of stochastic signal quantisation and suprathreshold stochastic resonance, supervisors: C. Pearce and D. Abbott.
- Dr Kieran McCaul, Bilateral breast cancer incidence and survival, supervisors: P. Solomon, P. Ryan and D. Roder.
- Dr John Moran (Doctor of Medicine), Statistical issues in the analysis of outcomes in critical care medicine, supervisors: P. Solomon and R. Ruffin.
- Dr Clare Saddler, Quantitative methods for investment decisions in communication networks, supervisors: J. Van der Hoek, A. Filinkov and M. Roughan.

#### University of Melbourne:

• Dr Richard Brak, *The enumeration of heaps and almost-convex polygons*, supervisors: Professor Tony Roberts, Associate Professor Aleks Owczarek.

#### University of Newcastle:

- Dr Nathan Brownlowe, Crossed products, endomorphisms and transfer operators, supervisor: Professor Iain Raeburn.
- Dr Zead Mustafa, A new structure for generalised metric spaces, with application to fixed point theory, supervisor: Dr Brailey Sims.
- Dr Shaun Thompson, Symmetric imprimitivity theory for twisted crossed products and reduced cross products, supervisor: Professor Iain Raeburn.
- Dr Trent Yeend, Topological higher-rank graphs, their groupoids and operator algebras, supervisor: Professor Iain Raeburn.

#### University of South Australia:

- Dr Manju Agrawal, *Dynamics and control of drug user populations*, supervisor: Professor Jerzy Filar.
- Dr Boda Kang, Measures of risk: time consistency and surrogate processes, supervisor: Professor Jerzy Filar.
- Dr Sergiy Kravchuk, Study of abrupt transitions in two-dimensional ideal flows: a singular perturbation approach, supervisor: Professor Vladimir Gaitsgory.
- Dr Xuan Vu, Analysis of necessary conditions for the optimal control of a train, supervisor: Professor Phil Howlett.

#### University of Sydney:

 Dr Peter O'Sullivan, The generalised Jacobson-Morosov theorem, supervisor: Professor Gus Lehrer.

• Dr Gregory White, Enumeration-based algorithms in linear coding theory, supervisor: Professor John Cannon.

#### Nominations for 2008 ANZIAM Medal

A search is underway to identify nominees for the 2008 ANZIAM Medal, and interested persons should forward their nominations in confidence to the Chair of the Selection Panel, Professor E.O. Tuck by the end of October 2007 at eotuck@internode.on.net.

Nominees must have given outstanding service to the profession of Applied Mathematics in Australia and/or New Zealand through their research achievements and through activities enhancing applied or industrial mathematics or both. The person nominated must be a long-term member and valuable contributor to ANZIAM and its predecressor, The division of Applied Mathematics of the Australian Mathematical Society.

#### ANZIAM Award for outstanding new researchers: J.H. Michell Medal

Nominations are called for the award of the J.H. Michell Medal for 2008 for ANZIAM outstanding new researchers. Nominees must be in their first 10 years of research on 1 January 2008 after the award of their PhD, and be members of ANZIAM for at least three years. Nominations close on 30 September 2007. Further information can be obtained from http://www.anziam.org.au/Medals/michell.html.

The Chair of the Selection Panel for the 2008 award is Professor Larry Forbes (School of Mathematics and Physics, University of Tasmania, Private Bag 37, Hobart TAS 7001, *Email:* Larry.Forbes@utas.edu.au).

Nominations can be made by any member of ANZIAM other than the nominee. A nomination should consist of a brief CV of the nominee together with the nominee's list of publications and no more than a one-page resume of the significance of the nominee's work. Nominations should be forwarded to the Chair of the Selection Panel, in confidence.

Please note that, where necessary, the Selection Panel will consult with appropriate assessors concerning evaluation of any nominee's research.

W. Summerfield	
Honorary Secretary, ANZIAM	

#### **Appointments**

#### **Edith Cowan University:**

- Associate Professor Lyn Bloom, Mr Geoff Comber and Dr David McDougall have accepted redundancies.
- Dr Tapan Rai is replacing Dr Sandra Pereira who is on maternity leave.

#### Queensland University of Technology:

- Ms Susan Barrett, Associate Lecturer.
- Dr Tim Moroney, Associate Lecturer.
- Mrs Helen Thomson, Lecturer.

#### University of Adelaide:

- Dr Robert Clarke has retired after 37 years service in Pure Mathematics.
- Professor Robert Elliot, as Research Professor of Mathematical Sciences from 18 December 2006 until 20 July 2007. Robert is currently the Royal Bank of Canada's Financial Group Professor of Finance at the University of Calgary.
- Dr Matthew Finn from Imperial College London, as a continuing Lecturer (level B) in Applied Mathematics. Matt's research interests are in fluid mechanics with an emphasis of fluid mixing and topological chaos.
- Dr Adrian Koerber, as a fixed term Lecturer (Level B). Adrian's research interests are in mathematical medicine with particular emphasis on quorom sensing in bacteria colonies.
- Dr Trent Mattner from CSIRO, as a continuing Lecturer (level B) in Applied Mathematics. Trent's research interests are in all aspect of fluid mechanics: experimental, computational and theoretical.
- Mrs Sue Middleton has been appointed as a fixed term Lecturer (Level B) in Statistics.
- Ms Lorenza Morello has been appointed as a Visiting Teaching Fellow for 2007.
- Mr Simon (Jono) Tuke, as a continuing Lecturer (Level A) in Statistics. Jono is currently completing his PhD here at Adelaide in the area of bioinformatics.

#### University of Ballarat:

• David Yost has taken over as the Deputy Head of School.

#### University of Melbourne:

- Dr Jan de Gier has been awarded an ARC Queen Elizabeth 2 Fellowship
- Dr Aurore Delaigle has been appointed as Belz Fellow.
- Professor Peter Hall has been appointed as ARC Federation Fellow.
- Dr Iwan Jensen has been promoted to Australian Research Fellow.
- Ms Olivia Madill has been appointed as Research Assistant.
- Dr Antoinette Tordesillas has been promoted to Associate Professor and Reader.

#### University of Newcastle:

- Dr Toke Carlsen has been appointed to a research position in analysis.
- Dr Richard Gerlach has resigned to take a position at University of Sydney
- Dr Zahirul Hoque has resigned to take a position in the UAE.

- Dr John Raynor has been appointed as Professor of Statistics.
- Mr Paul Rippon has been re-appointed and promoted to Lecturer in Statistics.
- Ms Elizabeth Stojanovski has been appointed as Lecturer in Statistics.
- Mr Mal Williams retired in late 2005.

#### University of New England:

• Dr B.Bleile has been invited to the Max Planck Institute in Bonn, Germany, for twelve months from September, 2007.

#### University of New South Wales:

- Three Senior Lecturers in Pure Maths are retiring this year, with more than 100 years of service between them: David Tacon (April), Dennis Trenerry (July) and Michael Hirschhorn (November).
- Three Lecturers have been promoted to Senior Lecturer: Astrid an Huef, Daniel Chan and Catherine Greenhill.
- In Statistics, Professor Matt Wand has left the University.

#### University of Queensland:

- New Level B appointment, October 2006 until December 2007. Andriy Kvyatkovskyy, working on a Carrick-funded teaching development project with Min-chun Hong, Joseph Grotowski, Victor Scharaschkin, Michael Bulmer, Michael Jennings and Peter Adams.
- Phillip Simon Isaac has had his appointment at Associate Lecturer (level A) extended until 29 July 2010. Phil is interested in many algebraic aspects of mathematical physics, and his most recent research has been on solutions to the Yang–Baxter equation arising from the quantum doubles of finite group algebras, and potential applications to exactly solvable anyonic models.

#### University of South Australia:

- Dr Zen Lu has been promoted to Senior Lecturer (Level C).
- Professor Stan Miklavcic has been appointed as the new Head of the School of Mathematics & Statistics, starting 19 March.

#### University of Sydney:

- David Easdown and Andrew Mathas have been promoted to Associate Professor.
- Dr Qiying Wang has been promoted to Senior Lecturer and in 2007 takes up an ARC Fellowship.

#### Awards and other achievements

Professor Mirka Miller from the University of Ballarat, has won the prestigious Leverhulme Visiting Professorship. The award enables a UK university to 'host an internationally distinguished academic from outside the UK (chosen and invited by the host institution), for up to ten months, in order to enhance the research skills and work of the host institution.

The Visiting Professor is expected to offer a short course of Leverhulme Lectures while in the UK.'

More information is available at:

http://www.leverhulme.ac.uk/grants\_awards/grants/visiting\_professorships/

The list of recipients is not published, but it is believed that there are usually five awards given annually, across all disciplines, worldwide. In the past, several Nobel prize winners have received this award.

Mirka plans to take up the award for four months, during June–September 2007, at the Kings College in London, working with Professor Costas Iliopoulos.

Mirka's research interests are in Graph Theory, Combinatorics, and Information Security.

### Courses

#### Flatness-based control design

This course will be delivered in Room EF122 at the University of Newcastle on Mondays and Thursdays from 10:00 am to 1:00 pm between 5 March and 12 April. On Monday 12 March and Thursday 05 April it will be held in Room ES309. Interested parties from the mathematical community are warmly encouraged to join us in the experience; the content is essentially applied differential algebra.

The course is free of charge and is aimed at postgraduate students and researchers in control theory and applied mathematics.

Assumed knowledge: Mainly linear algebra, differential calculus and differential equations, basics of linear system theory.

Presenter: Professor Jean Levine, Centre Automatique et Systemes, Ecole des Mines de Paris, France.

Biography: Jean Levine is Director of Research at the Centre Automatique et Systemes (Systems and Control Lab) of Ecole des Mines de Paris. He has been working on nonlinear filtering and control design for nonlinear systems since 1980, on theoretic aspects as well as industrial applications.

Address: Room EF122/Room ES309, The University of Newcastle, University Drive, Callaghan NSW 2308.

Contacts: Dr Jose De Dona (e-mail: Jose.Dedona@newcastle.edu.au, Tel: (02) 49216088) or Dr Jacqui Ramagge (e-mail: jacqui.ramagge@newcastle.edu.au, Tel:  $(+61\ 2)$  4921 5545).

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#### Conferences

#### Conference marking Professor Gavin Brown's 65th birthday

On 5 and 6 March the School of Mathematics and Statistics will host a conference called 'Expansions, inequalities and approximations', in honour of the mathematical achievements of the Vice-Chancellor of the University of Sydney, Professor Gavin Brown. Organisers: Donald Cartwright, Don Taylor, Bartek Trojan

Web: http://www.maths.usyd.edu.au/u/donaldc/gbrown/index.html

### GL07 Geometry and Lie Theory: A conference marking Gus Lehrer's 60th birthday

First week: 2-6 July 2007, Australian National University, Canberra.

Second week: 9–13 July 2007, University of Sydney, NSW

Organisers: James Borger, Peter Bouwknegt, Anthony Henderson, Bob Howlett, Am-

non Neeman and Andrew Mathas.

Web: http://www.maths.usyd.edu.au/u/SemConf/lehrerfest.html

## Call for Papers: 8th International Conference on Finite Fields and Applications (Fq8)

9-13 July 2007, Melbourne, Australia.

The aim of this conference is to bring together researchers from all aspects of finite fields, theory, computation and applications. Previous meetings have been in Las Vegas (USA), Glasgow (Scotland), Waterloo (Canada), Augsburg (Germany), Oaxaca (Mexico) and Toulouse (France). The conference is organised by Deakin University.

Web: http://fq8.it.deakin.edu.au

#### The 2007 AustMS Annual Conference

The 51st Annual Meeting of the Australian Mathematical Society will take place at La Trobe University, Melbourne, 25–28 September 2007.

This is a call from the program committee for informal nominations for plenary speakers from amongst those eminent mathematicians who will be visiting Australia during the period of the meeting. Please contact the conference director Geoff Prince (G.Prince@latrobe.edu.au) with your nominations before 1 March 2007. These nominations will augment our existing list and the program committee will attempt to bring you an exciting line up in September.

The conference will also host special sessions that cover a broad range of topics in mathematical research and its applications. Each special session will have a keynote speaker and suggestions for these speakers can be made directly to the session organisers once the session details are announced in the near future.

Web: http://www.latrobe.edu.au/mathstats/maths/conferences/AMS2007/

#### 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.

Dr Daniella Leonte; U. NSW; February 2007; -; QUT; Professor Kerrie Mengerson

Dr Cathal Walsh; Trinity College, Dublin, Ireland; February 2007; –; QUT; Professor Kerrie Mengerson

Professor Chris Field; Dalhousie University; 21 January 2007 to 3 March 2007; –; UMB; – Professor Feng Dai; University of Alberta, Canada; 3 to 11 March 2007; expansions, inequalities and approximations; USN; D.I. Cartwright

Professor James Byrnes; Prometheus Inc; 1 to 16 March 2007; expansions, inequalities and approximations; USN; D.I. Cartwright

Prof Derek Holt; University of Warwick; 13 January 2007 to 17 March 2007; computational group theory; USN; J.J. Cannon

Dr Hidekazu Nagahata; Okayama University; 27 September 2006 to 20 March 2007 –; UMB Prof Wieslaw Krawcewicz; University of Montreal; 15 January 2007 to 31 March 2007; Symmetric topological invariants and their application to non-linear elliptic partial differential equations; USN; E.N. Dancer

Prof Christopher Field; Dalhousie University; 28 March 2007 to 4 April 2007; asymptotic approximations; USN; J. Robinson

Dr Robert Carls; -; 12 March 2007 to 6 April 2007; p-adic methods; USN; D.R. Kohel

Vladimir Rittenberg; University of Bonn; 15 January 2007 to 20 April 2007; -; UMB; -

Prof Philip Maini; -; 3 to 24 April 2007; mathematical biology; USN; N. Joshi

Mr Sergei Haller; Justus-Liebig-Universität, Gießen; 16 January 2006 to 11 May 2007; algorithmic methods for lie groups; USN; S. Murray

Mr Henrik Baarnhielm; Queen Mary College, London; 1 April 2007 to 16 May 2007; group theory algorithms; USN; J.J. Cannon

Dr Ruth Baker; University of Oxford; 4 December 2006 to 25 May 2007; -; UMB; -

Dr Alex Kiteav; Steklov Mathematical Institute; 24 January 2007 to 25 May 2007; singularities and other properties of integrable systems; USN; N. Joshi

Serge Kruk; Oakland University; 16 January 2007 to 30 May 2007; -; UMB; -

Dr Willem de Graaf; Universita Di Trento; 9 April 2007 to 8 June 2007; computational group theory; USN; J.J. Cannon

Professor Phil Howlett; University of South Australia; 8 January 2007 to 30 June 2007; –; UMB: –

Dr Yan Wang; University of South Australia; 15 January 2007 to 30 June 2007; –; UMB; – Inessa Epstein; University of California; 15 January 2007 to 31 July 2007; –; UMB; –

Prof Buyung-Moo Kim; Chungju National University; 31 July 2006 to 31 July 2007; integral theory; USN; D.E. Taylor

Dr Toshio Ohnishi; Institute for Statistical Mathematics, Tokyo, Japan; 5 Feb 2007 to 31 July 2007; –; USQ; Dr Peter Dunn

Dr Eric Badel; INRA (National French National Institute for Agricultural Research): Wood Material Laboratory (LERMAB) – Nancy, France; February–November 2007; –; QUT