GRADUATION – APRIL 2008

CONGRATULATIONS to all our April graduates! Special mention is due the following:

PhD: Issarest Weeraprajak;
BSc(Hons): Tim Candy, Matthew Hendtlass, Qian (Isabella) Hou, Wen-Jhe Lee, Anna MacDonald, Stephen McConnachie, Dimitri Schritt, Michael Snook, Rachael Tappenden, Gloria Teng & Thomas Watson.

PGDipSci with Distinction: Joshua Collins & Miriam Hodge.
CONGRATULATIONS to Peter Humphries, who has submitted his PhD thesis for examination. The title is *Combinatorial Aspects of Leaf-Labelled Trees*. Congratulations also to Rachael Tappenden, who has been awarded a 3-year PhD scholarship from the NZIMA.

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**PAPERS ACCEPTED**

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Journal/Conference</th>
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<tr>
<td>D S Bridges</td>
<td><em>Continuity and Lipschitz constants for projections</em></td>
<td>J. Logic and Alg. Programming</td>
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<tr>
<td>T Gernhard, K Hartmann &amp; D Wong</td>
<td><em>Stochastic properties of generalised Yule models, with biodiversity applications</em></td>
<td>Journal of Mathematical Biology</td>
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**PAPERS PUBLISHED**

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<tr>
<td>H Q Bui &amp; R S Laugesen</td>
<td><em>Approximation and spanning in the Hardy space, by affine systems</em></td>
<td>Constr. Approx. 28(2008), 149-172</td>
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<tr>
<td>D W Redding, K Hartmann, A Mimoto, D Bokal, M Devos &amp; A O Mooers</td>
<td><em>Evolutionary distinct species capture more phylogenetic diversity than expected</em></td>
<td>Journal of Theoretical Biology 251, 606-615</td>
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CONFERENCES / VISITS

Rick Beatson: Mathematical Methods for Curves & Surfaces Conference, Norway, 26 June – 1 July.


Alex James: 2008 AIMS Arlington Conference, University of Texas at Arlington, 18 – 21 May. Talk entitled Dynamical Models of O₂ Uptake.

Raazesh Sainudiin: Talk entitled Six Resolutions of the n-coalescent at the University of Auckland’s Bioinformatics Institute, 24 April


Mike Steel: Annual HIV Evolution and Dynamics Meeting, Santa Fe Institute, USA, 27-30 April.

Mike Steel: Mathematics and Informatics in Evolution and Phylogeny, France, 10-12 June.

Mike Steel: Bayesian Phylogeny Meeting, Renji Institute, Budapest, 25-29 June


WELCOME TO OUR DEPARTMENTAL VISITORS  (E = Erskine Fellow)

<table>
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<th>Visitor</th>
<th>Organization</th>
<th>Host</th>
<th>From</th>
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<tr>
<td>Dr Tim Robinson</td>
<td>University of Wyoming, USA</td>
<td>J Brown</td>
<td>13/12/07</td>
<td>11/7/08</td>
<td>605</td>
<td>8028</td>
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<tr>
<td>Dr Robin Havea</td>
<td>University of the South Pacific, Fiji</td>
<td>D Bridges</td>
<td>1/2/08</td>
<td>11/7/08</td>
<td>605</td>
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<tr>
<td>David Sutton</td>
<td>University of York</td>
<td>A James</td>
<td>1/5/08</td>
<td>15/9/08</td>
<td>616</td>
<td>8876</td>
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<tr>
<td>Prof Ron Christensen (E)</td>
<td>University of New Mexico, USA</td>
<td>C Scarrott</td>
<td>5/5/08</td>
<td>31/7/08</td>
<td>607</td>
<td>8875</td>
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<tr>
<td>Prof Christopher Bose</td>
<td>University of Victoria, Canada</td>
<td>R Murray</td>
<td>1/7/08</td>
<td>31/12/08</td>
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<td>8028</td>
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<tr>
<td>Prof Horst Malchow (E)</td>
<td>University of Osnabrück, Germany</td>
<td>A James</td>
<td>1/9/08</td>
<td>2/11/08</td>
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<td>Prof Brian Sleeman (E)</td>
<td>University of Leeds, UK</td>
<td>M Plank</td>
<td>6/9/08</td>
<td>19/10/08</td>
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This is a joint Australia-New Zealand meeting, incorporating the 2008 Australian Mathematics Colloquium and the 2008 New Zealand Mathematics Colloquium.

**Invited Speakers**
The following speakers have accepted invitations to give plenary addresses to the convention:

- Béla Bollobás (Cambridge, UK and Memphis)
- Carl de Boor (Wisconsin-Madison)
- Vaughan Jones (Berkeley) AustMS Distinguished Lecturer
- Kerry Landman (Melbourne)
- Gregory F Lawler (Chicago)
- Charles Leedham-Green (Queen Mary, London)
- John W Morgan (Columbia)
- Karen Parshall (Virginia)
- James Sneyd (Auckland) ANZIAM Lecturer
- Angelika Steger (ETH Zurich)
- Neil Trudinger (ANU).

**Special Sessions**
- Applied Dynamical Systems in Engineering and the Physical Sciences
- Number Theory

Department members are encouraged to propose special sessions in their fields of interest. Special sessions in which there is an Australian co-organiser are particularly welcome. Please see [http://www.math.canterbury.ac.nz/ANZMC2008/call-for-special-sessions/](http://www.math.canterbury.ac.nz/ANZMC2008/call-for-special-sessions/) for details of how to propose a special session.

**BOCHNER PRIZE**
Carlos Kenig, Louis Block Distinguished Service Professor at the University of Chicago and an Erskine Visiting Fellow in this department in 2001, was awarded a 2008 Bochner Prize by the American Mathematical Society. These prizes are awarded every 3 years. The other two recipients for 2008 are Alberto Bressan (Penn State University) and Charles Fefferman (Princeton University).

- Qui Bui

**QUOTATION**
A pertinent quote from Felix Klein’s lecture entitled *Mathematics and the Applied Sciences* (2 September 1893):

“I am led to these remarks by the consciousness of a growing danger in the higher educational system of Germany – the danger of separation between abstract mathematical science and its scientific and technical applications. Such separation could only be deplored, for it would necessarily be followed by shallowness on the side of the applied sciences and by isolation on the part of pure mathematics.”

- Douglas Bridges
SEMESTER 2 SEMINAR SERIES

Thursday 1 May, 3.10pm, Erskine 446 (general): Alistair Smith (Beca Engineering)
The Basics of Transport Modelling and Accident Prediction

Friday 2 May, 3.10pm, Erskine 446 (technical): Robert Corless (University of W. Ontario)
Barycentric Hermite Interpolants for Event Location in Initial-Value Problems

Thursday 8 May, 3.10pm, Erskine 446 (general): Charles Semple (University of Canterbury)
Combinatorial Problems in Conservation Biology

Thursday 15 May, 3.10pm, Erskine 446 (general): Malte Peter (University of Auckland)
Homogenisation Problems in PDEs: Reaction-Diffusion Processes

Thursday 22 May, 3.10pm, Erskine 446 (general): Peter Smith (University of Canterbury)
Why is a Statistician Working on Mobile Phones?

Thursday 29 May, 3.10pm, Erskine 446 (general): Mike Steel (Biomathematics Res. Centre)
The Joys of Being Mean: Tricks for (Evolutionary) Trees

Thursday 5 June, 3.10pm, Erskine 446 (general): Vivien Kirk (University of Auckland)
Designing Experiments using Mathematics: Nonlinear Dynamics and Calcium Oscillations

GRADUANDS’ AFTERNOON TEA - SNAPSHOTs

QUOTATION

(From “Imperial Science” by Eugene Goodheart, in “The Common Review”)
“In a time like the present when the interdisciplinarity is the rage, one should be aware of how it can become the vehicle of reductionism, the impoverishing translation of one field into another. Political theory becomes the scientific study of statistics, history of geography, literature of ideology, religion of a scientific understanding of our origins. Too often, the desire for the interdisciplinary is a symptom of a loss of confidence in the integrity of one’s own discipline. Unless it is based on mutual respect among disciplines and a sense of its own limits, interdisciplinary work becomes vacuous.”

- Douglas Bridges