

Newsletter

Mathematics & Statistics

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GRADUATION



L to R: Thomas Steinke (BSc Hons); Matthew Botur (BSc Hons); Sha Zhu (BSc Hons); Clare Bycroft (BSc Hons); David Rezza Baqaee (BSc Hons and Senior Scholar); Amanda Hughes (BSc); and Michael Langton (PhD)

(More graduation photos inside)

CONGRATULATIONS!

- Congratulations to the following students who graduated this month:

LANGTON, Michael	Ph D	Mathematics
LIGHTFOOT, Ashley	MSc	Mathematics
BAQAE, David Rezza	BSc (Hons)	1 st combined honours Mathematics; 2 nd combined honours Economics
STEINKE, Thomas	BSc (Hons)	1 st combined honours Mathematics; 2 nd combined honours Computer Science
ZHU, Sha (Joe)	BSc (Hons)	1 st combined honours Statistics; 2 nd combined honours Mathematics
BOTUR, Matthew	BSc (Hons)	Mathematics
BYCROFT, Clare	BSc (Hons)	Mathematics
GALBRAITH, Samuel	BSc (Hons)	Mathematics
CLERE, Matthew	BSc	Statistics
DE SILVA, Tashka	BSc	Mathematics
DU, Yong	BSc	Mathematics
HUGHES, Amanda	BSc	Mathematics
RUSS, Chelsea	BSc	Mathematics & Geography
SANDER, Nicholas	BSc	Mathematics
TOMLINSON, Hannah	BSc	Mathematics & Biochemistry
WILLIS, Jonathan	BSc	Mathematics



Maarten & Alexandra McKubre-Jordans celebrate with Maarten's supervisor, Prof Gaven Martin, the awarding of Maarten's PhD degree at the Massey University graduation ceremony in Auckland on 13 April.

- **Jennifer Brown** is an associate investigator on a grant from the Oticon Foundation in New Zealand, to investigate the prevention of hearing loss during ear surgery. Dr Greg O'Beirne from Communication Disorders is the principal investigator. The \$380,000 grant was announced in November 2009 so congratulations are rather belated. Jennifer is working with Tim Robinson, University of Wyoming, on new statistical techniques for the analysis of audiometric data. Tim will be visiting the Department in May.
- **Jeroen Schillewaert** has been awarded a Research in Pairs Fellowship, jointly with Koen Thas, in Oberwolfach.

WELCOME TO OUR DEPARTMENT VISITORS

<u>Visitor</u>	<u>Organization</u>	<u>Host</u>	<u>From</u>	<u>To</u>	<u>Room</u>	<u>Extn</u>
Bruce Craig	Purdue University	R Sainudiin	11/1/10	11/7/10	607	8875
Peter Olsson	Chalmers University	D Wall	26/3/10	30/6/10	607	8028
Glen van Brummelen (Erskine)	Quest University	C Montelle	26/4/10	29/5/10	605	8875
Volkmar Liebscher	Greifswald University	M Steel	1/5/10	8/5/10	620	7431

ERSKINE FELLOW – PROFESSOR GLEN VAN BRUMMELEN

Professor Glen van Brummelen is a Canadian historian of Mathematics specializing in historical applications of Mathematics to Astronomy. He graduated with a PhD degree from Simon Fraser University, Canada, in 1993 and went on to become a Professor of Mathematics at Bennington College, USA, from 1999 to 2006. He then transferred to Quest University, Canada, as a founding faculty member. A former President of the Canadian Society for the History and Philosophy of Mathematics, Glen was a co-editor of *Mathematics and the Historian's Craft: The Kenneth O. May Lectures* (Springer, 2005) and has published the first major history in English of the origins and early development of trigonometry, *The Mathematics of the Heavens and the Earth: The Early History of Trigonometry*. Glen is hosted by Clemency Montelle and is based in Room 605.



GRADUANDS' AFTERNOON TEA



CONFERENCES & VISITS

Staff enjoying pizza on the Auckland waterfront while attending the "Envisioning the Future" conference at Auckland University



*Standing: Rua Murray, Alex James, John Hannah, Michael Plank and Phillipa Williams
Seated: Irene David, PhD student Shannon Ezzat and Phil Wilson*

Rick Beatson: to give a talk entitled *Faster, Fast Evaluation* at the 7th International Conference on Curves and Surfaces in Avignon, France, 24-30 June 2010.

John Hannah, Alex James and Rua Murray attended the Senior Secondary and Undergraduate Mathematical Sciences Workshop at Auckland University, 11-12 April.

Dominic Lee: to give a presentation at the Valencia ISBA conference in Benidorm, 3-8 June 2010 and to attend the CDMS Regional Conference on *Bayesian Nonparametric Statistical Methods: Theory and Applications* in Santa Cruz, 16-20 August 2010.

Igor Rychkov: to present a poster entitled *Smooth Surface Reconstruction and Roughness Analysis from Terrestrial Point Clouds* at the 7th International Conference on Curves and Surfaces in Avignon, France, 24-30 June 2010, followed by a research visit to the University of Rennes.

Jeroen Schillewaert: gave a talk entitled *Infinite Veronesean caps* during a research visit this month to the University of Western Australia, Perth.

PAPERS SUBMITTED

Jennifer A Brown, Mohammed Salehi M, Mohammed Moradi & Miriam Hodge: *Adaptive and unequal probability survey designs for environmental management* (submitted to Journal of the Iranian Statistical Society)

Gascuel O & Steel M: *Inferring Ancestral Sequences in Taxon-rich Phylogenies* (Mathematical Biosciences)

Hordijk W, Hein J & Steel M: *Autocatalytic Sets and the Origin of Life* (Entropy)

Magnuson-Ford K, Mooers A, Rioux-Paquette S, Steel M: *Comparing Strategies to Preserve Evolutionary Diversity* (Journal of Theoretical Biology)

PAPERS ACCEPTED

Ingram T & Steel M: *Modelling the unpredictability of biodiversity in ecological networks* (Journal of Theoretical Biology)

H Malchow, A James & R Brown: *Competition and diffusive invasion in a noisy environment* (Mathematical Medicine and Biology)

Mihaescu R & Steel M: *Logarithmic bounds on the posterior divergence time of two sequences* (Applied Mathematics Letters)

Raazesh Sainudiin & Thomas Steinke: *A rigorous extension of the first Schönhage-Strassen integer multiplication algorithm using Interval arithmetic* (accepted for presentation at CCA2010, the 7th International Conference on Computability and Complexity in Analysis, in Zhenjiang, China, 21 -25 June.

Steel M & Penny D: *Origins of Life: Common Ancestry put to the test* (Nature)

Gunter Steinke & Jeroen Schillewaert: *Flat Laguerre planes of Kleinewillinghofer type III.B* (Advances in Geometry)

PAPERS PUBLISHED

Ronald Begg, David J N Wall & Graeme C Wake: *On a multicompartement age-distribution model of cell growth* (IMA Journal of Applied Mathematics 2010, 1-27)

Le Compte A J, Lee D S, Chase J G, Lin J, Lynn A & Shaw G M (2010): *Blood glucose prediction using stochastic modeling in neonatal intensive care* (IEEE Transactions on Biomedical Engineering 57(3), 509-518)

Lemke D, Brown J A, Hulme P & Tadesse V (2010): *Monitoring and modelling, assessing the impact of invasive plants on the landscape* (Geoworld April 2010, pp 20-24)

GRADUATION DAY

