December 2014 Newsletter *Mathematics and Statistics*



Distinguished Professor



Congratulations to Mike Steel on his promotion to Distinguished Professor. The title of Distinguished Professor is reserved for UC professors who have clearly demonstrated world-class academic leadership and achievements of the highest international standing over a decade or more. Mike is Director of the Biomathematics Research Centre and Deputy Director of the Allan Wilson Centre. **Above left**: Mike with Jan Evans-Freeman and Rod Carr at the Distinguished Professor awards. **Above right**: Mike being presented with another recent award, the University of Canterbury Research Medal.

Congratulations to Charles Semple who has been awarded the College's Established Researcher Award.

Congratulations to Maarten McKubre-Jordens for his College of Engineering Early Career Teaching Award.

Congratulations to PhD student Timm Treskatis who has won the Aitken Prize at ANZMC8, the 8th Australia and New Zealand Mathematics Convention held in Melbourne this month.



Congratulations to Dr James Dent (above left) who graduated this month. James was supervised by Douglas Bridges and Maarten McKubre-Jordens.



Congratulations to Hadleigh Frost, BSc(Hons) graduate in Maths and Physics, who has been awarded a Rhodes Doctoral Scholarship to study Theoretical Physics at Oxford.

NZ Statistical Association Conference, Wellington 24-26 November



Congratulations to Jennifer Brown who was awarded life membership at the recent NZSA conference for her contributions to Statistics. **Above left:** Jennifer and two of the other three life membership awardees, David Scott and Neil Cox. The fourth was Steve Haslett. **Above centre:** Also attending the conference with Jennifer was Statistics PhD student Naeimeh Abi. **Above right:** Congratulations to Zoe Williams who won 3rd Prize in the student competition. Her talk was titled *Modelling New Zealand Guest Nights.*

2014 School Prize Winners

Congratulations to the following:

Peter Bryant Memorial Prize (100 level): shared between Kevin Chew and Matt Gordon.

Peter Bryant Memorial Prize (200 level): shared between Benjamin Bolton and William Jelley.

Cook Memorial Prize: Carolyn Irons

Gordon Petersen Memorial Prize: Clare Ford

Page Memorial Prize: Leon Friedrich

W Brent Wilson Memorial Prize: Louis Warren

Helen Wily Memorial Prize: Yun-Hee Choi

Congratulations also to the following students who are graduating this month:

PhD: James Dent (Mathematics)

BSc (1st class Hons): Robert Culling (Mathematics)

BSc (2nd class Hons): Thomas Doehring (Statistics & Philosophy)

BSc: Chaz Hall (Maths); Dipin Kalra (Computer Science & Mathematics); Amber Malpas (Physics & Mathematics); Stephanie McGimpsey (Biological Sciences & Mathematics); Harrison Ploeg (Physics, Mathematics & Astronomy): Hayden Rabel (Mathematics & Statistics); Kirby Streeter (Mathematics & Geography); David Tebbett (Mathematics); Jennifer Thompson (Physics & Mathematics); and Xingbo Wang (Computer Science & Statistics). **BA:** Ummi Mohd Salleh (Statistics); Helen Smith (Mathematics & Maori)

Congratulations to Chris Price who has been promoted to Associate Professor.

Congratulations also to Elena Moltchanova who reports from Helsinki that her PhD student Nadja Schrier has successfully defended her thesis titled *The Influence of Weather, Season, Climate and Disasters on Non-communicable Diseases.* Nadja was co-supervised by Elena and Professor Johan Eriksson of the University of Helsinki.



Welcome to our new Postgraduate Student

Welcome to Auwal Abdullahi from Nigeria, who arrived in November to commence his PhD under the supervision of Alex James, Mike Plank, and Hazel Chapman (School of Biological Sciences). Auwal graduated BSc from the University of Maiduguri and MSc from the University of Jos, Nigeria. Currently, he is studying Scatter-Hoarding data with the intention of building mathematical models. He is interested in learning different deterministic and stochastic models. Auwal is based in Room 513, extn 8870.

Postgraduate Conference 2014



Winning big in Whitianga

The 2014 NZMASP conference has been a success for our Department! Between 17 and 20 November, 12 students (Honours, Masters and PhDs) took part in the New Zealand Mathematics and Statistics conference hosted by the Auckland Postgraduate Students 2014 University students. A roughish flight and a longish bus ride brought our team to Whitianga, where we joined 50 other students from all over New Zealand. Apart from the lack of real coffee at the conference venue, the organization was flawless - nice weather, nice sand and nice talks! We all did a great job, especially Rachelle Binny (Defining Moments: Spatial Structure in a Model of Collective Cell Movement), Jack Simpson (Red Numbers: The Study of Mathematics Under Soviet Socialism) and Timm Treskatis (Viscoplastic Fluids: Laborious but Fun) who won three of the four conference prizes, the fourth being allegedly a consolation prize for the other universities! Even taking into account an injured chin and a big toe concussion (tough science is tough!), the expedition was a triumph. Next year, the 2015 NZMASP will be organized by the Waikato University students and will be held in Taupo. Hopefully, even more students will join us and help the Canterbury team to win big again.

- Giulio Dalla Riva

Papers Accepted

Creutz, B. and Viray, B.: On Brauer groups of double covers of ruled surfaces, Matematische Annalen.

Creutz, B. and Viray, B;: Two torsion in the Brauer group of a hyperelliptic curve, Manuscripta Mathematica.

Koh, N-T: *Hereditary convexity for harmonic homeomorphisms*, Indiana University Mathematics Journal.

Papers Published

Moradi, M., Brown, J.A. and Guo, W.: *Adaptive Cluster Sampling in Two-stage Sampling*, Australian & New Zealand Journal of Statistics DOI: 10.1111/anzs.12094

Research Tip of the Month

Making graphics/figures for research papers and talks can be time consuming, the results can be variable, and there seem to be a range of views on what program(s) to use. I asked Dietrich to compile a short report comparing some of the packages that people already say they use, and this report can be viewed at:

<u>http://www.math.canterbury.ac.nz/bio/downloads/files/latex_figures.pdf</u>. Feel free to send any comments for updating this (it is just an initial, high-level appraisal) and/or for further advice from Dietrich about the use of different packages. For talks, although I use Powerpoint, I find the equation editor for this hopelessly clunky, and instead have moved to "LaTeXiT" a free download for mac, which allows you to write latex and drag it seamlessly across into a powerpoint presentation (and it beams out as high resolution latex). Another useful link is to "Detexify" <u>http://detexify.kirelabs.org/classify.html</u>, where you manually draw a symbol and let it figure out what the latex command might be.

- Mike Steel

News from the Library

- Library Liaison Officer for Mathematics and Statistics, Dr Phil Wilson http://bit.ly/NKgZ2J
- New books: Librarians' Picks of the Month http://canterbury.libguides.com/newbooks
- New titles for Mathematics and Statistics <u>http://bit.ly/NVj1hV</u>; for Mathematical Statistics <u>http://bit.ly/MIS2WA</u>; new-titles-list generator <u>http://bit.ly/1brTI3E</u>

From the Web

- 1. The Top 100 Papers (Nature News & Comment) http://bit.ly/1ulxYQM
- 2. Bibliometrics: Is Your Most Cited Work Your Best? (Nature News & Comment) http://bit.ly/1tFXq2n
- 3. Using Google Scholar in Scholarly Workflows (Google Scholar Blog) http://bit.ly/1DsQ2bp
- 4. The Back Page High-impact-factor Syndrome (APS) <u>http://bit.ly/1wQiOPF</u>
- 5. Preserving Scholarly Information: LOCKSS, CLOCKKS, and Portico (Scientific American) http://bit.ly/14wXnfL
- 6. Growing Impact of Older Articles (Scholarly Kitchen) <u>http://bit.ly/1pK1oHn</u>
- 7. Open Access is Tiring Out Peer Reviewers (Nature News & Comment) http://bit.ly/1AQy7OT
- 8. The 10 Things Every New Grad Student Should Do (Data Pub [U California]) http://bit.ly/1shdKSz
- 9. The Best Software for Writing Your Dissertation (Inside Higher Ed) http://bit.ly/1F4CHsv
- 10. Write LaTeX Integrates Mendeley Bibliographies (Information Today) http://bit.ly/1vkagUm
- 11. Like an Open Book [Adobe ereader concerns] (Inside Higher Ed) http://bit.ly/1DX35SB
- 12. What Book Changed Your Mind? (Chronicle of Higher Education) http://bit.ly/1EtoXHf
- 13. Big Numbers: Google Challenges Wolfram to Open Up Math (Information Today) http://bit.ly/1wgVXfA
- 14. The Rise of Astrostatistics (Symmetry Magazine) http://bit.ly/1tddN15
- 15. Biology Meets Geometry (UCSB Current) <u>http://bit.ly/1s1DSzG</u>
- 16. Wrong But Not Stupid [correcting student errors supportively] (Math with Bad Drawings) http://bit.ly/1shftY9
- 17. Humans Have Innate Grasp of Probability (Nature News & Comment) http://bit.ly/1yZrs0V
- 18. Outer Space: Where to Stand to Look at Statues (plus.maths) http://bit.ly/1xGm9n8
- 19. Simon Beck's Astonishing Landscape and Snow Art Illustrates the Cold Beauty of Mathematics in Pictures
- 20. Mesmerizing Rebuild of a Mechanical Fourier Calculator (Boing Boing) <u>http://bit.ly/1xRkqOC</u>
- 21. Pumpkin Geometry: Stunning Shadow Sculptures That Illuminate an Ancient Mathematical Technique (The Guardian) <u>http://bit.ly/1tJ7Vlh</u>
- 22. A New London Gallery Will Submerge Its Visitors in Math and Jet Turbulence (Motherboard) http://bit.ly/1ux4wYZ(The Guardian) http://bit.ly/1APOPig
- 23. The Noisy Ratios That Keep Math Wild (Motherboard) http://bit.ly/14wUefW
- 24. The Mathematical Reason All Hipsters Look the Same (.Mic) http://bit.ly/1gyZnbT

And on the lighter side ...

- Dark Side of the Horse, November 10, 2014 http://bit.ly/1pKIIfS
- Sunday Science Poem: The Geometry of Love (The Finch and Pea) <u>http://bit.ly/1pcM3P4</u>
- The Librarians (TV show) <u>http://bit.ly/1DVxb9c</u>

John Arnold | Mathematics/Statistics Liaison Librarian



Compliments of the Season!

