

Newsletter

Mathematics & Statistics

This Newsletter

- **Congratulations**
- **Papers Published**
- **Refereed Papers Accepted For Presentation**
- **Papers Accepted for Presentation**
- **Paper Submitted**
- **Department Research Funds**
- **Problem Corner**
- **Department Visitors**
- **Photos**

*"It is a mistake to try to look too far ahead.
The chain of destiny can only be grasped
one link at a time".*

Sir Winston Churchill



CONGRATULATIONS

"Congratulations to Jennifer Brown who received a grant from NZIMA for her work with David Borchers (St Andrews) on mark recapture statistics."

PAPERS PUBLISHED

Neil A. Watson, "A Nevanlinna theorem for superharmonic functions on Dirichlet regular Greenian sets", *Mathematica Bohemica*, v130, 2005:1-18.

REFEREED PAPERS ACCEPTED FOR PRESENTATION

The following papers are to be presented at International Workshop on Statistical Modelling IWSM, Sydney July 10-15 2005:

- J. Gong, I.L Hudson and P. Graham, "A Bayesian Causal Cox Model (CCM) for All-or-Nothing Compliance".
- I.L. Hudson and M.R. Keatley, " Statistical Methods in Phenological Research".
- K. Fukuda and I.L. Hudson, "Use of SSA to characterise site-specific differences, global and local climate impacts on air pollution 1998-2002".
- Kang, I.L. Hudson, A. Rudge and G. Chase "Wavelet signatures of agitation and sedation profiles".
- S. Kim, I.L. Hudson and M.R. Keatley, "MTD analysis of flowering & climatic states".

PAPER ACCEPTED FOR PRESENTATION

Paper by K. Fukuda and I.L. Hudson "Identification of climatic impacts and effects on air pollution levels using SSA" at the International Conference on Environmental Engineering in Agricultural Systems, Sept 12-15,2005, Kanazawa University, Ishikawa, Japan.

PAPER SUBMITTED

Charles Semple and Mike Steel. Unicyclic networks: compatibility and enumeration. Submitted to IEEE/ACM Transactions in Computational Biology and Bioinformatics .

Mihaela Baroni, Charles Semple and Mike Steel. Hybrids in real time. Submitted to Systematic Biology.

OTHER

1-2/2/05 Prof Martin Liebeck, Imperial College. He gave a colloquium on 1/2/05 entitled "Random walks on finite groups."

3-4/3/05 Prof Marcel Herzog, Tel Aviv University. He gave a colloquium on 3/3/05 entitled "Characterization of non-nilpotent groups with two irreducible character degrees."

Successful grant application: Dr Gerhard Roehrl (University of Birmingham) has been awarded an EPSRC grant in which I am named as a Visiting Researcher. The grant will provide 10000 pounds for me to visit Roehrl in Birmingham between October 2005 and October 2008.

Ben Martin

DEPARTMENT RESEARCH FUNDS

Congratulations to the following who had/have been awarded grants towards conference expenses:

- ♦ Ben Martin: Oberwolfach meeting "Groups and Geometry", 6-12/3/05. I gave a talk entitled "A geometric approach to complete reducibility"
- ♦ To attend 20th "International Workshop on Statistical Modelling" in Sydney, 10 - 15 July 2005 -
 - Susan Kim
 - Jean Gong
 - In Kang
 - Kyodo Fukuda
- ♦ Charles Semple: To Mathematics of Evolution and Phylogeny Conference Institut Henri Poincare, Paris, 17th to 21 June, 2005.
- ♦ Rick Beatson: Algorithms for Approximation 5, Chester, 18 - 22 July 2005.

PROBLEM CORNER

A totally ordered set A has the property that

$\forall p, q \in A$ with $p < q$, the open interval (p, q) is isomorphic to the set of rational numbers.

How many different (non-order-isomorphic) such sets A are there?

Note: the answer is a finite number, but it is quite tricky to pin it down!

Bill Taylor

DEPARTMENT VISITORS

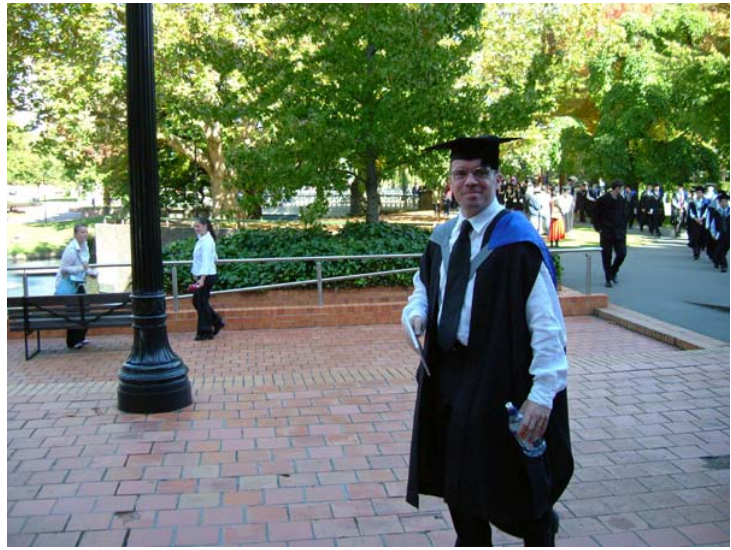
| Current Visitors | Name of Organization | From | To | Room | Extn |
|---|--------------------------------------|--------------|---------------|------|--------|
| Prof. Claude Belisle | Université Laval | 15 Dec 2004 | 30 Jun 2005 | 501 | 8376 |
| Dr Hakan Lindstrom | Uppsala Technical University | 7 Feb 2005 | 31 May 2005 | 501 | 8376 |
| Dr Burkard Polster | Monash University | 21 Feb 2005 | 10 Jun 2005 | 605 | 8028 |
| Prof. Greg Reid | | 28 Jan 2005 | 28 Mar 05 | 502 | 7663 |
| Michelle Swenson | University of Texas, Austin | 27 Jan 2005 | 30 April 2005 | 720 | 8337 |
| Visitors due to arrive | Name of Organization | From | To | Room | Ext No |
| Dr John Holt | University of Massey | 15 May 2005 | 31 Mar 2006 | 502 | 7663 |
| Associate Professor Richard Laugeson | University of Illinois | 1 Jun 2005 | 16 Aug 2005 | 607 | 8875 |
| Prof. Daniel Naiman | John Hopkins University, Maryland | 9 Jul 2005 | 14 Aug 2005 | 710 | 7431 |
| Prof. Dominic Welsh | University of Oxford | 1 Sept 2005 | 1 Dec 2005 | 620 | 7431 |
| Ms. Tanja Gernhard | University of Munich,Germany | 24 Sept 2005 | 24 Dec 2005 | 616 | 8876 |
| Dr Granville Tunncliffe-Wilson | Lancaster University, U.K. | 25 Sept 2005 | 15 Nov 2005 | 710 | 7431 |
| Dr Jon Pitchford | University of York, York.U.K. | 15 Oct 2005 | 15 Jan 2006 | 607 | 8875 |
| Prof. Daniel Huson | Tuginben University, Germany | 15 Feb 2006 | 15 Jun 2006 | | |
| Prof. Stephen Gardiner | | 10 July 2006 | 31 Aug 2006 | | |



Dr Narashima Mittinty and Supervisor Dr Easaw Chacko



Gareth Evans BSc (Hons) Mathematics



Allan Greenstreet (BSc)



BSc (Hons)

Peter Adshead (Physics) Grant McGregor (Physics) Rosalind Phillips (Chemistry) Angus Prain (Mathematical Physics)