

Newsletter

Mathematics & Statistics

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EVOLUTION 2007

Close to 900 participants have registered for the annual international Evolution meeting to be held in Christchurch from 16-21 June 2007 at the Christchurch Convention Centre.

The meeting is being organised by the Allan Wilson Centre and this will be the first time it has been held outside North America. Several students and staff will be helping out during the event.

The conference has become the main international event for researchers and students interested in evolution. One of the special symposia has been devoted to the work of the late Professor David Lloyd of the University of Canterbury.

Two satellite meetings have also been organised at the Marine Lab in Kaikoura, before and after the main meeting.

For registration and further information:
<http://www.evolution2007.com>



*Math PhD students **Simone Linz** & **Beata Faller** model the Evolution 2007 t-shirts that will be sold at the conference.*



Belated congratulations to EMTH Course Co-ordinator Sarah Hickford on the birth of her son Bradley, who was born on 20 February 2007 weighing in at 8 lbs!



PAPER SUBMITTED

G Li, M Steel & L Zhang: *More taxa are not necessarily better for the reconstruction of ancestral character states* (Systematic Biology)

PAPERS ACCEPTED

B Martin: *On the Diophantine Equation $x^2 = my^2 + \alpha$* (NZ Journal of Mathematics)

W Taylor: *Symmetric Games with only Win/Loss Outcomes* (Journal of Recreational Mathematics)

PAPER PUBLISHED

Phillip L Wilson & Frank T Smith: *The Development of the Turbulent Flow in a Bent Pipe* (J Fluid Mechanics 2007, vol. 578, pp 467-494)

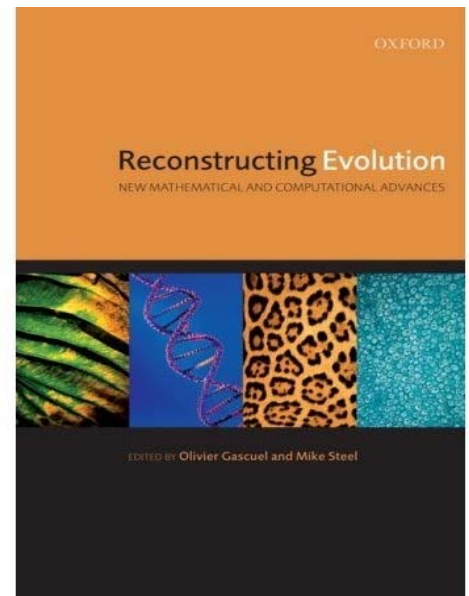
BOOK IN PRESS

Olivier Gascuel & Mike Steel: *Reconstructing Evolution: New Mathematical and Computational Advances.*

This book is based on papers presented at a meeting held at the Institut Henri Poincare in Paris in 2005 that was organized by the two editing authors.

It will be published in June by Oxford University Press.

One of the chapters was written by **Charles Semple**, whilst another was co-authored by PhD student **Klaas Hartmann**. Thanks to **Dietrich Radel** for setting up a website to help with the editing of chapters and proofreading.



MT ISOBEL CHALLENGE



Tim & Irene David, Scott Graybill, Alex James, Frances & David Wall, and friend

Last weekend, approximately 250 intrepid souls ran and/or biked up and down Mt Isobel. Competitors had the choice of entering as individuals, tackling both the running and cycling legs, or as teams sharing the agony.

The weather was good but by the time the competitors neared the summit, they were feeling the cold. Fortunately, the Hanmer hot pools were just what the "PhD" ordered for post-race recovery!

In the Veteran Mixed Team section, **David & Frances Wall** came a creditable 6th in a time of 3 hrs 10 mins, while **Tim & Irene David** were not far behind in 8th place on 3 hrs 46 mins.

Alex James (Individual Open Women) came in at 3 hrs 15 mins, while **Scott Graybill** (Individual Open Men) finished in 2 hrs 57 mins.

WELCOME TO OUR DEPARTMENTAL VISITORS

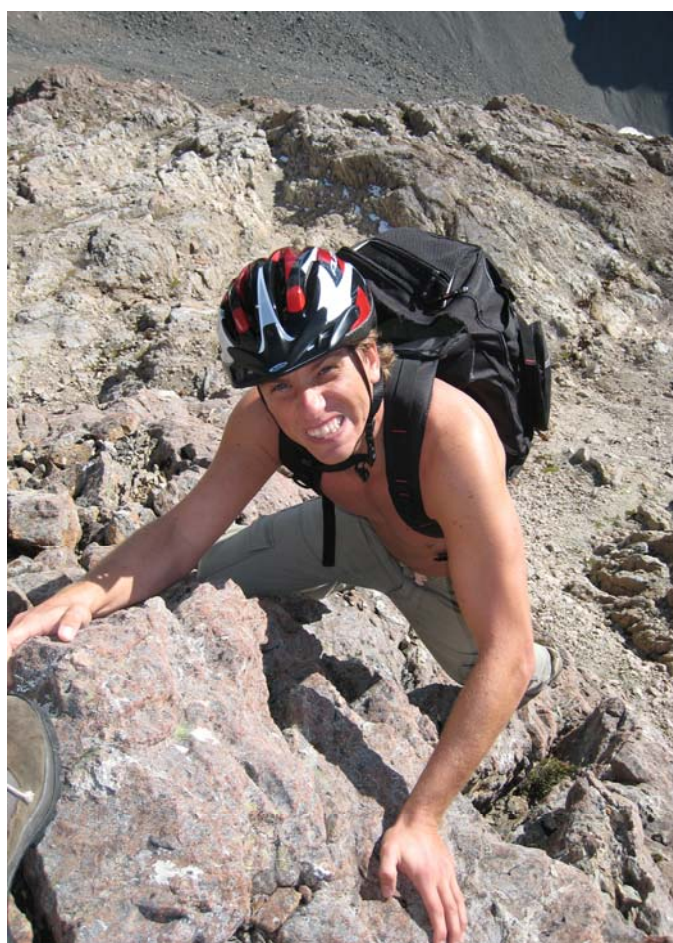
Visitor	Organization	Host	From	To	Room	Extn
Ms Simone Linz	Dusseldorf University, Germany	C Semple	29/9/06	31/8/07	724	7691
Dr Bhalchandra Thatte	Massey University	M Steel	8/1/07	-	720	8337
Prof. Lyman MacDonald	University of Wyoming, USA	J Brown	14/4/07	10/6/07	605	8028
Will Pyman	Wentworth College, England	A James	1/5/07	15/9/07	710	7694
Tobias Thierer	University of Auckland	M Steel	21/5/07	21/12/07	616	8876
Dr Vincent Berry	Montpellier University, France	C Semple	18/6/07	4/7/07	605	8028
Prof. Willy Hereman	Colorado School of Mines, USA	M Hickman	1/7/07	20/12/07	605	8028
Prof. Angus MacIntyre	Queen Mary University of London	D Bridges	16/7/07	17/10/07	607	8875

(Erskine Fellows)

Dr Vincent Berry (University of Montpellier II) will be returning to the department for 2 weeks from 18 June. His visit coincides with two meetings: the first is Evolution 2007, which is to be held in Christchurch, and the second is the Dumont D'Urville Workshop to be held in Kaikoura. The second meeting is jointly funded by New Zealand and French funding agencies. Vincent is a guest of Charles Semple.

Another returnee is **Tobias Thierer** from the Bioinformatics Institute at Auckland University. Tobias did his MSc thesis with us a few years ago. He is currently working on developing bioinformatics software and implementing (together with Neil Gemmell) the BESTGRID / Karen high-speed interactive network system at the University of Canterbury. Tobias is based in Room 616 and is being hosted by Mike Steel.

Will Pyman (Room 710) is currently studying for the MRes at the University of York. He is here to research for his dissertation on modelling the rate of honey dew production by scale insects. Will's host is Alex James.



Visitor Fabio Pardi getting to grips with Goldney Ridge (Mt Rolleston) during 'field work' with Klaas Hartmann.

PROBLEM CORNER

As usual, there is a chocolate fish for the first correct solution:

Four ants sit on a spherical globe originally at points A, B, C, D; A is (0E, 45N), B is (90E, 45S), C is (180E, 45N), and D is (270E, 45S). They start walking towards each other A ->B ->C ->D ->A, with the same speed. What are their latitudes after ¼ revolution (i.e. when their longitudes increased by 90)?

Bill Taylor