

NEWSLETTER

November / December 2010

Operations Research Society of New Zealand, Inc.
PO Box 6544, Wellesley St. Auckland, New Zealand, www.orsnz.org.nz

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The newsletter is published three times per year. Regular dates are April, August, and December. Submissions deadline is the 15th of the month for the following month's issue. Send contributions by email to the Newsletter editor, Kenneth Kuhn, at newsletter@orsnz.org.nz.

President's Report

It's a busy time in Auckland as we complete our exam marking and make the final preparations for the upcoming 45th ORSNZ conference. We have a record expected attendance with 53 presentations planned, including a number of international speakers. We are sure this will result in an exciting and stimulating conference. As always, the latest details (including registration options) can be found at <http://conference.orsnz.org.nz>.



Talking of web sites, for many years the Engineering Science department at the University of Auckland has hosted the ORSNZ web pages. Recent changes have resulted in us moving most of the ORSNZ website to a new host, GoDaddy.com, where we expect to remain for many years to come. The Engineering Science department continues to host the secure ORSNZ credit card payment processor. On behalf of all ORSNZ members, I'd like to thank the department for their generous past and continuing support of the ORSNZ web services.

I recently had the opportunity to represent the ORSNZ at the 30th anniversary of the Operations Research Society of China. This significant milestone event was also attended by representatives of OR societies from Japan, Malaysia, South Korea, Hong Kong, Singapore, and Taiwan. As part of the conference, each society representative delivered a short presentation about OR in their home country (see below). There was also a Council meeting of APORS (Association of Asian Pacific Operational Research Societies) that we all attended. I would like to thank Degang Liu and the Operations Research Society of China for their kind hospitality during my visit.



Along with a number of my Auckland colleagues, I recently attended the November INFORMS conference in Austin, Texas. A highlight of this conference for me was the awarding of a prize to Alastair McNaughton and David Ryan for their recent work on adjacency branching in integer programming models for forestry planning. Well done, Alastair and David, on this international accolade for your work. In another form of recognition, David Ryan has been asked to be part of a review being conducted of the Mathematical Sciences in the United Kingdom. I'm sure David will make a valuable contribution in this role.

Andrew Mason

President

18 November 2010

Chapter News

Auckland News

As I write this short column, most of the OR folks in Auckland are preparing for the 45th annual conference to be held in Auckland on the 29th and the 30th of November.

Aside from the preparation for the conference, we have been busy supervising many OR related part iv student projects. We are all looking forward to our part iv's presenting their projects at the Young Practitioner Prize sessions of the conference.

Earlier this month Andrew Mason, Geoff Leyland, Stu Mitchel, Alaister Mc Naughton, Geoff Pritchard, Poul Rouse, Golbon Zakeri, Tony Downward and Javad Khazaei attended the annual INFORMS meeting that was held in Austin Texas this year. The conference was packed with good OR activities and Mike Trick provided good and interesting updates through his blog everyday. One of the highlights of the conference was the presentation of the ENRE section's best forestry paper prize to Alaister Mc Naughton and David Ryan for their paper "Adjacency Branches Used To Optimize Forest Harvesting Subject to Area Restrictions on Clearfell" that appeared in volume 54 of Forest Science. Many congratulations to Alaister and David.



Finally, Ziming Guan (and supervisor Andy Philpott) have received an honourable mention for 2010 student paper competition from the Committee on Stochastic Programming (COSP). Their work developed a multistage stochastic

programming model for the New Zealand Dairy Industry.

Golbon Zakeri

Wellington News

Wellington members have been involved in planning various conferences around the world this year. John Davies was program chair for the Western Decision Sciences Institute 39th annual meeting (6-9 April 2010, Lake Tahoe, Nevada). Stefanka Chukova was general chair of the 4th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling (APARM 2010), 2-4 December 2010 at Victoria University of Wellington.

The main highlight of the year was a popular talk from Prof Mike Wright (University of Lancaster) in April on "Cricket umpire scheduling" in which the main optimisation criteria appeared to be assigning umpires to the club which provided the best afternoon tea. Mike used this scheduling problem as an example of assisting the clients to know what to ask for rather than just delivering schedules from their written requirements.

Very pleasingly, the talk was attended by a number of students, ORSNZ faithful, and members of the more general public, even some statisticians. We are grateful to ORSNZ for providing some funds for drinks and nibbles, and to take Mike out for dinner that evening. We hope to do this more regularly.

On a more personal note, Benjamin Johnston was born 5/5/10 and is tracking along nicely at the 50th percentile of weight and height. Is there an age limit on the new online-only student membership?

Mark Johnston

Canterbury News

The MSCI group has three interesting Honours projects this year. Hannah Norton is collaborating with a Geology student, Georgina Richards, on improving drilling for geothermal power, with Mighty River Power. Owen Warburton and Chris Blackmore are studying value of water for TrustPower. Steve Jones is studying the



process of new product development AuCom, Ltd.

Our PhD student, Ranga Prabodanie, has submitted her thesis, "A Market Mechanism for the Optimal Control of Groundwater and Surface Water Pollution From Nitrates." As of this writing, it is still with the referees. She had a paper published this year: Prabodanie, Ranga, John F. Raffensperger, and Mark Milke, "A Pollution Offset System for Trading Non-point Source Water Pollution Permits," *J. of Environmental and Resource Economics*, 2010, v. 45. n. 4, pp. 499-515. In the mean time, she is working with Fritz Raffensperger studying the potential of a smart market for run-off in the American Midwest, on a grant with the U.S. Environmental Protection Agency.

The big news, however, is the earthquake. It has pushed back assessment dates, but with careful adjustments, we have developed a revised schedule which students can complete on time. The Commerce building suffered mainly cosmetic damage. The attached photo shows damage to gib board in a stairwell. We're still open for business!



John Raffensperger

Reports from Overseas Conferences

INFORMS conference, Austin 7–10 Nov.

In November 7-10 I attended the Institute for Operations Research and the Management Sciences (INFORMS) conference and annual meeting at Austin, Texas. I delivered an invited paper "Branching Techniques for Constrained Forest Harvesting", co-author David Ryan.

I was also honoured to be presented with the 2010 "Best Publication Award in Forestry" jointly with my co-author, professor David Ryan. This was for a paper "Adjacency Branches used to Optimize Forest Harvesting Subject to Area Restrictions on Clearfell" which we had earlier published in *Forest Science*, 54(4) p 442-454, 2008. INFORMS is the main international OR research network. *Forest Science* is the top academic journal for forestry research. The award was made by ENRE, the Section on Energy, Natural Resources and the Environment. In essence this award was recognizing that David and I had written the best research article on forestry matters in the world during 2008. It was a very special occasion.

The conference was as always very stimulating with an abundance of top academic contacts, including a number of other Kiwis! The papers were varied and of high interest. I particularly enjoyed meeting and chatting with people whom I had previously only known through their research writings.

Austin is a lovely city. I enjoyed the art galleries, the museums, a ride in a greyhound bus out into the Texas countryside, a visit to a vibrant Negro church programme and a couple of evenings crouching under the Congress bridge watching the bats.

Alastair McNaughton



CALL FOR PAPERS – TAMC 2011
8TH ANNUAL CONFERENCE ON THEORY AND APPLICATIONS OF
MODELS OF COMPUTATION

MAY 23 – 25, 2011, TOKYO, JAPAN

EMAIL: tamc2011@easychair.org

<http://www.tamc2011.com/>

Plenary Speakers:

Tetsuo Asano (JAIST, Japan)
Richard Lipton (Georgia Tech., USA)

Special Session/Tutorials:

To be announced

Program Committee:

Olaf Beyersdorff (Hannover, Germany)
Cristian Calude (Auckland, New Zealand)
Amit Chakrabarti (Hanover, USA)
Danny Chen (Notre Dame, USA)
Zhi-Zhong Chen (Tokyo, Japan)
Marek Chrobak (Riverside, USA)
Pierluigi Crescenzi (Firenze, Italy)
William Gasarch (College Park, USA)
Tero Harju (Turku, Finland)
Miki Hermann (Palesseau, France)
Sanjay Jain (Singapore, Singapore)
Ming-Yang Kao (Chicago, USA)
S Rao Kosaraju (Baltimore, USA)
Carlos Martín Vide (Tarragona, Spain)
Peter Bro Miltersen (Aarhus, Denmark)
Mitsunori Ogihara, chair (Miami, USA)
Rüdiger Reischuk (Lübeck, Germany)
Christian Sohler (Dortmund, Germany)
Jun Tarui, co-chair (Tokyo, Japan)
Takeshi Tokuyama (Sendai, Japan)
Chee-Keng Yap (New York, USA)

TAMC Steering Committee:

Manindra Agrawal (Kanpur, India)
Jin-Yi Cai (Madison, USA)
S. Barry Cooper (Leeds, UK)
John Hopcroft (Ithaca, USA)
Angsheng Li (Beijing, China)

Important Dates:

Submission Deadline	Jan. 10, '11
Notification of Acceptance	Feb. 18, '11
Final Version Due	Mar. 7, '11
Early Registration Deadline	Mar. 28, '11

Location: After six annual meetings in China ('04-'09) and one in Czech Republic ('10), TAMC2011 will be held in Japan, at the University of Electro-Communications, about 10 miles southwest of the Shinjuku district in Tokyo.

Aims and Scope: TAMC aims at bringing together a wide range of researchers with interests in computational models and their applications. The main themes of the conference are *computability*, *complexity*, and *algorithms*. The topics of interest include (but are not limited to):

- algebraic computation,
- approximation algorithms,
- automata theory,
- biological computing,
- circuit complexity,
- computability,
- computational biology,
- computational complexity,
- computational game theory,
- computational logic,
- computational geometry,
- cryptography,
- data structures,
- distributed algorithms,
- graph algorithms,
- information and randomness,
- learning theory,
- natural computation,
- network algorithms,
- neural computational models,
- online algorithms,
- parallel algorithms,
- proof complexity,
- quantum computing,
- randomized algorithms,
- streaming algorithms.

Submission Guideline: A submission must conform to the Springer-Verlag Lecture Notes style. The length must be at most 10 pages; a clearly marked appendix may be added, but it will be read at the discretion of PC. Submission of papers accepted for publication in journals is not permitted. Nor is simultaneous submission to other conferences with published proceedings.

Proceedings: The conference proceedings will be published as a volume in *Lecture Notes in Computer Science*.

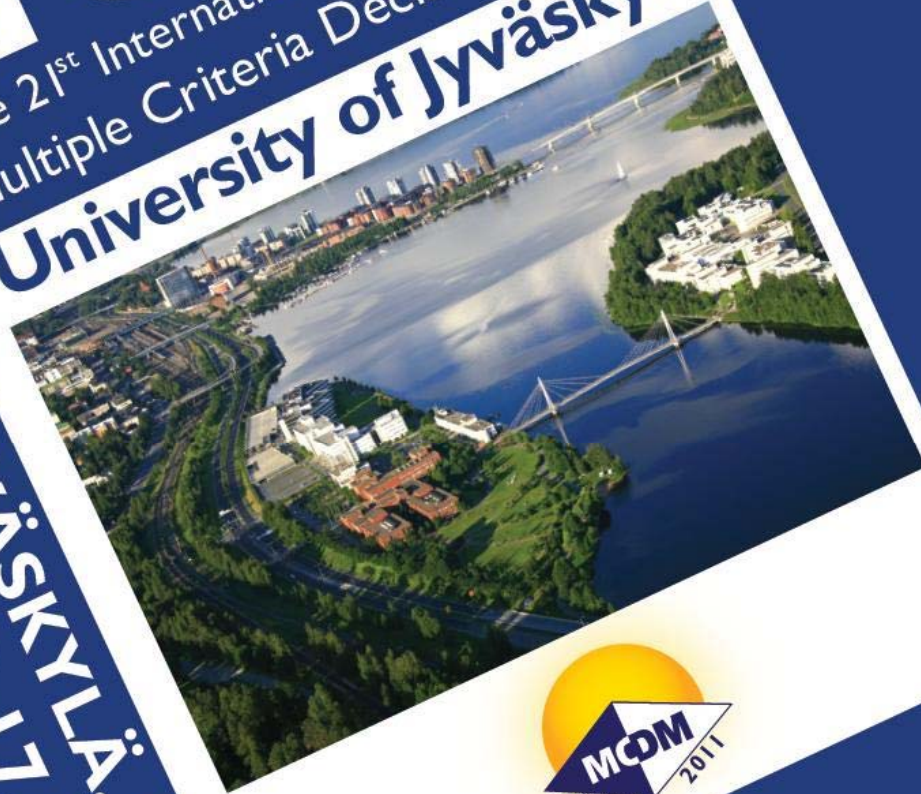
Journal Special Issues: A special issue of selected papers from TAMC2011 in *Theoretical Computer Science* is being planned. Another TAMC special issue may be published in *Mathematical Structures in Computer Science*.



MCDM

The 2^{1st} International Conference on
Multiple Criteria Decision Making

University of Jyväskylä



JYVÄSKYLÄ, FINLAND
June 13-17, 2011
Venue: Agora



UNIVERSITY OF JYVÄSKYLÄ

<http://www.jyu.fi/mcdm2011>



General Chair
Kaisa Miettinen

Program Chairs
Pekka Korhonen
Jyrki Wallenius

Meetings Calendar

New Zealand

45th Annual Conference of the Operational Research Society of New Zealand
29 – 30 November, 2010, Auckland
<http://conference.orsnz.org.nz>

Asia Pacific

Conference for the International Federation of Operational Research Societies
10 – 15 July 2011, Melbourne, Australia
<http://www.ifors2011.org>

8th Annual Conference on Theory and Applications of Models of Computation
23 – 25 May 2011, Tokyo, Japan
<http://www.tamc2011.org>

8th International Conference on Optimization
10 – 13 December 2010, Shanghai, China
<http://www.fdsf.fudan.edu.cn/icota8/>

International

Latin-American Algorithms, Graphs, and Optimization Symposium
28 March – 1 April 2011, Bariloche, Argentina
<http://www-2.dc.uba.ar/lagos2011>

USA/Europe Air Traffic Management Research and Development Seminar
14 - 17 June 2011, Berlin, Germany
<http://www.atmseminarus.org>

21st International Conference on Multiple Criteria Decision Making
13 – 17 June 2011, Jyväskylä, Finland
<https://www.jyu.fi/en/congress/mcdm2011>

Winter School on Network Optimization
17 – 21 January 2011, Estoril, Portugal
<http://netopt2011.fc.ul.pt/>

International Conference on Operations Research
30 August – 2 September 2011, Zurich, Switzerland
<http://www.or2011.ch/>

VII ALIO/EURO Workshop on Applied Combinatorial Optimization
4 – 6 May 2011, Porto, Portugal
<http://www.dcc.fc.up.pt/ALIO-EURO-2011/>

19th International Symposium on Transportation and Traffic Theory
18 – 20 July 2011, Berkeley, USA
<http://www.isttt19.org/>



Officers of the Operational Research Society of New Zealand 2010

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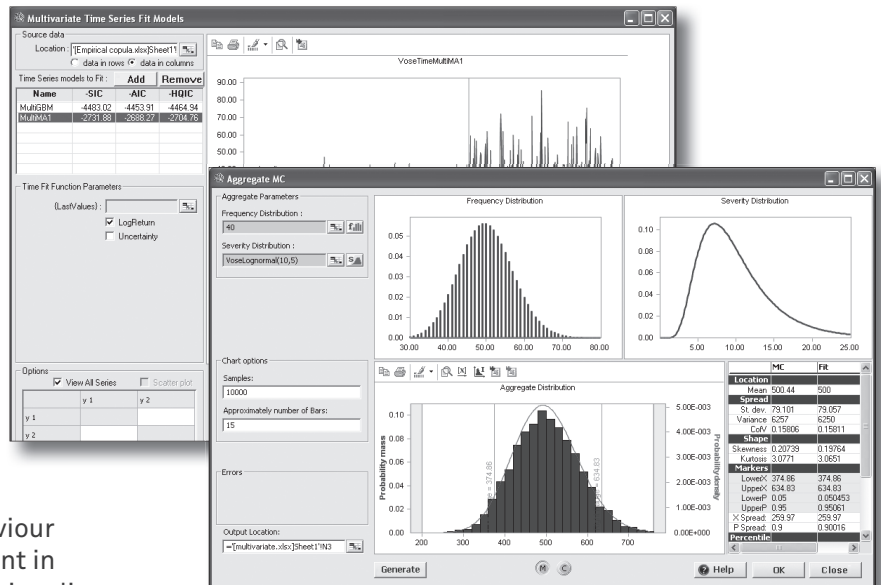
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