

Final Report of
CanaDAM 2011 (Canadian Discrete and
Algorithmic Mathematics Conference)
University of Victoria, Victoria BC,
May 31 – June 3, 2011

June 27, 2011

The third Canadian Discrete and Algorithmic Mathematics conference (CanaDAM 2011) was held at the University of Victoria during May 31 – June 3, 2011. This conference is held biennially in odd numbered years and alternates with the SIAM Conference on Discrete Mathematics which is held in even numbered years. The CanaDAM conference series has very quickly become an internationally known and respected conference in the field of Discrete Mathematics.

The CanaDAM 2011 meeting had 307 registered participants of which 129 were students. At least 19 different countries were represented on the list of participants. A great deal of credit for the success of the conference goes to the Program Committee chaired by Nick Wormald from the University of Waterloo and the Local Arrangements Committee chaired by Gary MacGillivray from the University of Victoria. More detail on the various organizing committees can be found on the conference web page <http://canadam.math.ca/2011>. The strength of the conference is directly related to its scientific program. The program committee under the leadership of Nick Wormald put together an excellent program consisting of 8 plenary talks, 39 invited minisymposia talks, 117 contributed minisymposia talks, and 72 contributed talks. The names and affiliations of the plenary speakers, and titles of their talks follow:

- Anne Bergeron (UQAM, Canada): “The Combinatorial Beauty of Genome Evolution”;
- Sara Billey (University of Washington, USA): “An Introduction to k -Schur Functions and QSYM”;
- Allan Borodin (University of Toronto, Canada): “When is it Good to be Greedy (in Algorithm Design)”;
- Chandra Chekuri (University of Illinois, Urbana-Champaign, USA): “Sub-modular Set functions Maximization via the Multilinear Relaxation and Dependent Randomized Rounding”

- Jacob Fox (MIT, USA): “Intersection Graphs, Drawings, Posets, and Separators”;
- Jeff Kahn (Rutgers University, USA): “Thresholds and Expectation Thresholds”;
- Alice Silverberg (University of California at Irvine, USA): “Counting Points on Elliptic Curves, from Gauss to present”;
- Stephan Thomasse (Universit Montpellier 2, France): “Applications of VC dimension for Graphs and Hypergraphs”.

In addition to these plenary talks there was a very well received 1 hour popular lecture on the mathematics of Origami given by Joseph O’Rourke from Smith College, USA. This lecture was preceded by a reception hosted in part by Elsevier.

One of the primary goals of these conferences is to encourage the participation of Canadian graduate students and PDFs. The three Canadian Mathematical Institutes (CRM, Fields and PIMS) as well as MITACS (Mathematics of Information Technology and Complex Systems networks) each pledged \$8300 towards the support of graduate students and PDFs attending the meeting. In addition to its monetary contributions, the Fields Institute assisted with the design and distribution of the conference poster for CanaDAM 2011. In order to receive financial support graduate students were encouraged to contribute talks. Furthermore, Brett Stevens from Carleton University hosted a problem session devoted to the presentation of research problems appropriate for graduate students. A reception for graduate students followed the problem session. It was especially gratifying that more than 40% of the attendees were graduate students and post doctoral fellows. This solid participation of students and PDFs could not have happened without the generous support of CRM, Fields, PIMS, MITACS.

The CanaDAM meeting now has a permanent ‘home’ with the Canadian Mathematics Society(CMS). The CMS provided all the conference services such as: webpage design and maintenance, abstract submission, and processing of registration fees for CanaDAM 2011. In addition to these services the CMS will also provide ongoing financial services support by maintaining a CanaDAM account into which registration fees prior to the conference are deposited. These funds will be transferred to the host institution for the processing of all conference expenses. After the conference expenses have been processed, seed funding for the next CanaDAM meeting (in the amount of approximately \$5000) will be deposited into the CanDAM account at the CMS. The CMS’s extensive experience in handling conferences and their online facilities were a tremendous asset in the planning of CanaDAM 2011. Having a permanent on line home for CanaDAM is particularly beneficial as it will provide continuity to the meeting.

Planning for CanaDAM 2013 is already under way. The executive committee for the next meeting has been struck. Its members are Frank Ruskey (University of Victoria), Odile Marcotte (UQAM, CRM), David Pike (Memorial), Gary

MacGillivray (University of Victoria), Brett Stevens (Carleton University), and Lorna Stewart (University of Alberta). The host institution for CanaDAM 2013 will be Memorial University in St Johns Newfoundland and David Pike will be the local arrangements committee chair.

Prepared by Prof. Ortrud Oellermann
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