

Meeting Director: Ahmed Ramzi Sourour (Victoria)

The Winter 2005 Meeting of the Canadian Mathematical Society welcomed 395 participants.

Following the usual format of the CMS Winter Meetings, the program included a wide variety of special sessions, plenary and prize lectures. The activities and scientific talks were held at the Victoria Conference Centre.

Plenary Lectures

Robert Guralnick (University of Southern California), '*Probabilistic Methods in Finite Group Theory*'.

Uffe Haagerup (South Denmark University), '*Free probability and the invariant subspace problem for von Neumann algebras*'.

Bryna Kra (Northwestern University), '*Additive Combinatorics and Ergodic Theory*'.

Andrew Majda (Courant Institute, New York University), '*New waves, PDEs, and coarse-grained stochastic lattice models for the tropics*'.

Oded Schramm (Microsoft), '*Understanding 2D critical percolation: from Harris to Smirnov and beyond*'.

Prize Lectures

CMS Coxeter-James Prize:

Robert McCann (Toronto), '*Free Boundaries in Optimal Transport*'

CMS Doctoral Prize:

Vasilisa Shramchenko (Concordia), '*Frobenius structures on Hurwitz spaces*'

CMS Adrien Pouliot Award:

Katherine Heinrich (Regina)

CMS G. de B. Robinson Award:

Yu-Ru Liu (Waterloo)

Special Sessions

The meeting hosted 15 parallel special sessions, covering a wide range of mathematical research interests, and also aspects of mathematics education and of the history of mathematics. These sessions had 230 talks of 25 minutes each. More details and abstracts of the talks can be found on the web site of the meeting: <http://www.math.ca/Events/winter05/speakers.html>.

Applied Partial Differential Equations, Org: Anne Bourlioux (Montreal), Reinhard Illner (Victoria), Boualem Khouider (Victoria)

Combinatorics, Org: Peter Dukes, Frank Ruskey (Victoria)

Discrete and Convex Geometry, Org: Karoly Bezdek (Calgary), Jozsef Solymosi (UBC)

Ergodic Theory, Org: Christopher Bose (Victoria), Andres del Junco (Toronto)

Graph Theory, Org: Jing Huang, Kieka Mynhardt, Wendy Myrvold (Victoria)

History of Mathematics, Org: Len Berggren (SFU)

Life Beyond Calculus, Org: Malgorzata Dubiel, Veselin Jungic (SFU)

Mathematics Inspired by Biological Models, Org: Fred Brauer (UBC), Pauline van den Driessche (Victoria)

Matrix Analysis, Org: Man-Duen Choi (Toronto), Douglas Farenick (Regina)

Nonlinear Analysis, Org: Martial Agueh (Victoria), Ivar Ekeland (PIMS), Robert McCann (Toronto)

Operator Algebras, Org: Marcelo Laca, John Phillips (Victoria)

Probability, Org: Martin Barlow, Edwin Pekins (UBC)

Topology, Org: Dale Rolfsen (UBC)

Variational Analysis and Optimization, Org: Jiming Peng (MacMaster), Jane Ye (Victoria)

Contributed Papers Session, Org: C. Robert Miers (Victoria)

Sponsors

- Department of Mathematics and Statistics, University of Victoria
- le Centre de Recherches Mathématiques
- The Fields Institute for Research in Mathematical Sciences
- MITACS
- Pacific Institute for the Mathematical Sciences
- Department of Mathematics and Statistics, Simon Fraser University
- Department of Mathematics, University of British Columbia
- Faculty of Science, University of British Columbia
- Faculty of Science, University of Victoria
- Faculty of Engineering, University of Victoria
- Faculty of Graduate Studies, University of Victoria

Local Arrangements

David Leeming (Victoria)
Gertrud Jeewanjee (CMS, ex-officio)