

Banff International Research Station



Workshop Calendar 2010

Banff from Sulphur Mountain
Kindly provided by Gordon Weber

JANUARY

- 1/10-1/15 Mathematics and Physics of Polymer Entanglement: Emerging Concepts and Biomedical Applications: E. Rawdon (U. Saint Thomas), H. S. Chan (Toronto), C. Soteros (Saskatchewan), L. Zechiedrich (Baylor)
- 1/17-1/22 Multi-scale Stochastic Modeling of Cell Dynamics: L. Popovic (Concordia), B. Ingalls (Waterloo), J. Mattingly (Duke), P. Swain (McGill)
- 1/24-1/29 Sparse Random Structures: Analysis and Computation: A. Edelman (MIT), E. Candes (California Institute of Technology), J. Gilbert (UCSB), R. Speicher (Queen's), B. Virag (Toronto)
- 1/31-2/5 Theory and Applications of Matrices Described by Patterns: P. van den Driessche (UVic), R. Brualdi (Wisconsin), S. Fallat (Regina), L. Hogben (Iowa State), B. Shader (Wyoming)
- 1/31-2/5 Branching Random Walks and Searching in Trees: L. Addario-Berry (Montréal), N. Broutin (INRIA), L. Devroye (McGill), C. McDiarmid (Oxford)

FEBRUARY

- 2/7-2/12 Small Scale Hydrodynamics: Microfluidics and Thin Films: R. Craster (Alberta), P. Demetrios (Imperial College), G.M. Homsy (UCSB)
- 2/14-2/19 Convex Algebraic Geometry: R. Thomas (Washington), M. Schweighofer (Rennes), B. Sturmfels (Berkeley)
- 2/21-2/26 Some Mathematical Problems of Material Science: Effects of Multiple Scales and Extreme Aspect Ratios: Y. Li (Rutgers), M. Vogelius (Rutgers)
- 2/28-3/5 Randomization, Relaxation, and Complexity: J.M. Rojas (Texas A&M), L. Gurvits (Los Alamos National Laboratories), P. Parrilo (MIT)

MARCH

- 3/7-3/12 Quasi-isometric Rigidity in Low-dimensional Topology: J. Behrstock (CUNY), M. Kapovich (UC Davis), W. Neumann (Columbia)
- 3/7-3/12 (0,2) Mirror Symmetry and Heterotic Gromov-Witten Invariants: I. Melnikov (Einstein Institute), J. Distler (Texas), R. Donagi (Pennsylvania), S. Sethi (Chicago), E. Sharpe (Virginia Polytech)
- 3/14-3/19 Geometric Scattering Theory and Applications: P. Perry (Kentucky), P. Hislop (Kentucky), R. Mazzeo (Stanford), A. Sá Barreto (Purdue)
- 3/21-3/26 Deterministic and Stochastic Front Propagation: L. Ryzhik (Chicago), X. Cabre (ICREA), F. Hamel (U. Aix-Marseille III), J. Quastel (Toronto), J.-M. Roquejoffre (U. Toulouse III)
- 3/28-4/2 Volume Inequalities: K. Bezdek (Calgary), R. Connelly (Cornell), A. Litvak (Alberta), F. Morgan (Williams College)

APRIL

- 4/4-4/9 Coordinated Mathematical Modeling of Internal Waves: T. Peacock (MIT), N. Balmforth (UBC), G. Ogilvie (Cambridge), B. Sutherland (Alberta)
- 4/11-4/16 Generalized Complex and Holomorphic Poisson Geometry: M. Gualtieri (Toronto), H. Bursztyn (IMPA, Rio de Janeiro), G. Cavalcanti (Oxford), N. Hitchin (Oxford), J. Hurtubise (McGill), R. Moraru (Waterloo)
- 4/18-4/23 Optimal Transportation and Applications: Y. Ge (U. Paris XII), A. Figalli (École Polytechnique), Y.-H. Kim (UBC), R. McCann (Toronto), N. Trudinger (ANU Canberra)
- 4/25-4/30 Character Varieties in the Geometry and Topology of Low-dimensional Manifolds: A. Reid (Texas), S. Boyer (UQAM), R. Canary (Michigan), W. Goldman (Maryland)

MAY

- 5/2-5/7 Functional Data Analysis: Future Directions: J. Ramsay (McGill), J. Cao (SFU), J. Nielsen (Carleton), F. Yao (Toronto)
- 5/2-5/7 Creative Writing in Mathematics and Science: M. Senechal (Smith College), F. Diacu (UVic)
- 5/9-5/14 Nonlinear Diffusions and Entropy Dissipation: From Geometry to Biology: D. Slepcev (Carnegie Mellon), E. Carlen (Rutgers), J.A. Carrillo (ICREA), J. Dolbeault (U. Paris Dauphine)
- 5/16-5/21 Inverse Transport Theory and Tomography: P. Stefanov (Purdue), G. Bal (Columbia), G. Uhlmann (Washington)
- 5/23-5/28 Self-Assembly of Block Copolymers: Theoretical Models and Mathematical Challenges: R. Choksi (SFU), Y. Nishiura (Hokkaido), A.-C. Shi (McMaster)
- 5/30-6/4 Diophantine Approximation and Analytic Number Theory: G. Walsh (Ottawa), M. Bennett (UBC), A. Granville (Montreal), J. Thunder (Northern Illinois)

JUNE

- 6/6-6/11 Whittaker Functions, Crystal Bases, and Quantum Groups: P. Gunnells (U. Mass., Amherst), B. Brubaker (MIT), D. Bump (Stanford), G. Chinta (City College of NY)
- 6/13-6/18 Inclusive Fitness in Evolutionary Modeling: P. Taylor (Queen's), S. West (Edinburgh), G. Wild (Western Ontario)
- 6/13-6/18 Evolutionary Games: K. Sigmund (Vienna), R. Cressman (Wilfrid Laurier), C. Taylor (Harvard)
- 6/20-6/25 Geometric Analysis and General Relativity: D. Pollack (Washington), L. Andersson (Max Plank Institute), M. Dafermos (Cambridge), G. Galloway (Miami)
- 6/27-7/2 Noncommutative L_p spaces, Operator spaces and Applications: Q. Xu (U. de Franche-Comté), M. Junge (U. Illinois, Urbana-Champaign), G. Pisier (Texas A&M)

JULY

- 7/4-7/9 Structure and Representations of Exceptional Groups: J. Sniatycki (Calgary), S.T. Ali (Concordia), W. Rossmann (Ottawa), S. Sternberg (Harvard), D. Vogan (MIT), J. Wolf (Berkeley)
- 7/11-7/16 Statistical Issues Relevant to Significance of Discovery Claims: R. Lockhart (SFU), J. Linnemann (Michigan State), L. Lyons (Oxford)
- 7/18-7/23 Statistical Genomics in Biomedical Research: D. Goldstein (École Polytechnique, Lausanne), J. Bryan (UBC), S. Dudoit (Berkeley), J. Fridlyand (Genentech Inc.), K. Pollard (UCSF), J. Quackenbush (Harvard)
- 7/25-7/30 Analysis and Boundary Value Problems on Real and Complex Domains: L. Lanzani (Arkansas), C. Kenig (Chicago)

AUGUST

- 8/1-8/6 Computational Complexity: V. Kabanets (SFU), P. Beame (Washington), S. Cook (Toronto), R. Impagliazzo (UCSD), A. Wigderson (Institute for Advanced Study)
- 8/8-8/13 Recent Advances on de Giorgi's Conjecture and the Study of Entire Solutions of Nonlinear Scalar Equations: Interaction of PDEs and Differential Geometry: C. Gui (Connecticut), M. del Pino (Chile), J.C. Wei (Chinese University of Hong Kong)
- 8/15-8/20 Multivariate Operator Theory: R. Douglas (Texas A & M), K. Davidson (Waterloo), J. Eschmeier (Saarbrücken)
- 8/22-8/27 Extreme Events in Climate and Weather - An Interdisciplinary Workshop: P. Guttorp (Washington), M. Fuentes (North Carolina State)

SEPTEMBER

- 9/5-9/10 New Trends on Structural Graph Theory: K. Kawarabayashi (National Institute of Informatics), B. Mohar (SFU), B. Reed (McGill), P. Seymour (Princeton)
- 9/12-9/17 Test Problems for the Theory of Finite Dimensional Algebras: V. Dlab (Carleton), J.A. de la Pena (UNAM), H. Lenzing (Paderborn), C.M. Ringel (Bielefeld)
- 9/19-9/24 Classification of Amenable C^* -algebras: A. Toms (York), M. Dadarlat (Purdue), S. Eilers (Copenhagen), G. Elliott (Toronto), M. Rordam (Southern Denmark)
- 9/26-10/1 Mathematical Foundations of Mechanical Biology: A. Goriely (Arizona), M. Epstein (Calgary), K. Garikipati (Michigan)

OCTOBER

- 10/3-10/8 Linking Neural Dynamics and Coding: Correlations, Synchrony, and Information: E. Shea-Brown (Washington), B. Doiron (Pittsburgh), K. Josic (Houston), N. Kopell (Boston U), A. Longtin (Ottawa), A. Reyes (NYU)
- 10/10-10/15 New Perspectives in Univariate and Multivariate Orthogonal Polynomials: P. Iliev (Georgia Tech), T. Bloom (Toronto), J. Geronimo (Georgia Tech), D. Lubinsky (Georgia Tech), E. Saff (Vanderbilt)
- 10/17-10/22 Front Propagation in Heterogeneous Media: Mathematical, Numerical, and Statistical Issues in Modelling a Forest Fire Front: A. Bourlioux (Montréal), C. Bose (UVic), J. Braun (Western Ontario)
- 10/24-10/29 Control and Optimization with Differential-Algebraic Constraints: S. Campbell (North Carolina State), L. Biegler (Carnegie Mellon), V. Mehrmann (Technische Universität Berlin)
- 10/31-11/5 Integrable and Stochastic Laplacian Growth in Modern Mathematical Physics: M. Putinar (UCSB), D. Crowdy (Imperial College), B. Gustafsson (RIT, Stockholm), J. Harnad (Concordia), M. Mineev (Los Alamos National Laboratory)

NOVEMBER

- 11/7-11/12 Topological Methods in Toric Geometry, Symplectic Geometry and Combinatorics: T. Bahri (Rider), F. Cohen (Rochester), M. Franz (Western Ontario), S. Gitler (Centro de Investigación del IPN), M. Harada (McMaster)
- 11/14-11/19 Quasisymmetric Functions: S. Billey (Washington), L. Billera (Cornell), R. Stanley (MIT)
- 11/21-11/26 Nonstandard Discretizations for Fluid Flows: P. Mineev (Alberta), V. Girault (Paris VI), J.-L. Guermond (LIMSI), G. Kanschat (Texas A&M)
- 11/28-12/3 Sampling and Reconstruction: Applications and Advances: A. Entezari (Florida), T. Moeller (SFU), D. Van De Ville (EPFL)

DECEMBER

- 12/5-12/10 Teachers as Stakeholders in Mathematics Education Research (MER): G. Toerner (Universitaet Duisburg, Essen), S. Friesen (Calgary), K. Hoechsmann (PIMS), B. Sriraman (Montana)
- 12/5-12/10 Retaining Talent in Engineering: A Workshop with Deans & Provosts: S. Brainard (Washington)

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