



Banff International Research Station



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Weekly Workshop Calendar 2011

JANUARY

- 1/09-1/14 Combinatorial Game Theory: R. Nowakowski (Dalhousie), E. Berlekamp (UC, Berkeley), T. Cazenave (Paris-Dauphine), A. Fraenkel (Weizmann Inst.), M. Mueller (Alberta)
- 1/16-1/21 Sparse Statistics, Optimization and Machine Learning: A. d'Aspremont (Princeton), F. Bach (École des Mines, Paris), M. Wainwright (UC, Berkeley)
- 1/23-1/28 Density Functional Theory: Fundamentals and Applications in Condensed Matter Physics: C. Garcia-Cervera (UC, Santa Barbara), E. Cancès (ENPC, INRIA, CERMICS), Y.A. Wang (UBC)
- 1/30-2/4 Linear Algebraic Techniques in Combinatorics/Graph Theory: H. Kharaghani (Lethbridge), S. Akbari (Sharif U.), R. Brualdi (U. Wisconsin, Madison), W. Haemers (Tilburg), B. Tayfeh-Rezaie (IPM, Iran), Q. Xiang (Delaware)

FEBRUARY

- 2/6-2/11 Ergodic Optimization: A. Quas (Victoria), J. Campbell (Memphis)
- 2/6-2/11 Topological Insulators and Superconductors: M. Franz (UBC), Z. Hasan (Princeton), J. Moore (UC, Berkeley), S. Zhang (Stanford)
- 2/13-2/18 Advancing Numerical Methods for Viscosity Solutions and Applications: R. Ferretti (U. di Roma Tre), M. Falcone (U. di Roma La Sapienza), I. Mitchell (UBC), H. Zhao (UC, Irvine)
- 2/20-2/25 Frontiers in Complex Dynamics: A. Bonifant (Rhode Island), M. Lyubich (Stony Brook)
- 2/27-3/4 Modelling and Analysis of Options for Controlling Persistent Infectious Diseases: D. Earn (McMaster), D. Fisman (Toronto)

MARCH

- 3/6-3/11 Sparse and Low Rank Approximation: H. Rauhut (Bonn), G. Kutyniok (Osnabrueck), J. Tropp (Caltech), O. Yilmaz (UBC)
- 3/13-3/18 Global/Local Conjectures in Representation Theory of Finite Groups: P.H. Tiep (Arizona), G. Malle (Kaiserslautern), G. Navarro (Valencia)
- 3/13-3/18 Functor Calculus and Operads: N. Kuhn (Virginia), M. Ching (Georgia), V. Turchin (Kansas State)
- 3/20-3/25 Interactions Between Contact Symplectic Topology and Gauge Theory in Dimensions 3 and 4: J. Etnyre (Georgia Tech), D. Auroux (UC, Berkeley), H. Boden (McMaster), O. Collin (UQAM)
- 3/27-4/1 Stochastic Multiscale Methods: Bridging the Gap Between Mathematical Analysis and Scientific and Engineering Applications: R. Ghanem (USC), G. Bal (Columbia), W. Liu (Northwestern), G. Papanicolaou (Stanford), B. Rozovsky (Brown)

APRIL

- 4/3-4/8 Quantum Control: H. Teismann (Acadia), H. Rabitz (Princeton), C. Rangan (Windsor), E. Zuazua Iriondo (Basque Center for Applied Mathematics)
- 4/10-4/15 Imaging, Interpretation and Modeling in Modern Immunology: D. Coombs (UBC), R. de Boer (Utrecht), R. Varma (NIAIDS-NIH)
- 4/17-4/22 Geometric Flows in Mathematics and Physics: E. Woolgar (Alberta), M. Carfora (Pavia), Z. Djadli (U. Grenoble 1), G. Huisken (Max-Planck-Institute, Potsdam), L. Ni (UC, San Diego)
- 4/24-4/29 Algebraic Graph Theory: M. Newman (Ottawa), C. Godsil (Waterloo)

MAY

- 5/1-5/6 Organized Tropical Convection and Large-scale Circulation: Theory, Modeling, and Observations: B. Khouider (Victoria), A.J. Majda (NYU), C. Zhang (Miami)
- 5/8-5/13 Number Theory and Physics at the Crossroads: N. Yui (Queen's), V. Batyrev (Tübingen), C. Doran (Alberta), S. Gukov (UC, Santa Barbara), D. Zagier (Max-Planck-Institut, Bonn)
- 5/15-5/20 Harmonic Analysis in Convex Geometry: V. Yaskin (Alberta), A. Koldobsky (Missouri), D. Ryabogin (Kent State), A. Zvavitch (Kent State)
- 5/22-5/27 Algebraic Combinatorix: G. Benkart (U. Wisconsin, Madison), S. van Willigenburg (UBC), M. Vazirani (UC, Davis)
- 5/29-6/3 Gradient Random Fields: M. Bishop (UC, Los Angeles), S. Adams (Warwick), R. Kotecky (Charles U.)

JUNE

- 6/5-6/10 KAM Theory and Geometric Integration: E. Faou (ENS, Cachan), W. Craig (McMaster), B. Grébert (Nantes)
- 6/12-6/17 Triangulated Categories and Applications: P. Balmer (UC, Los Angeles), D. Christensen (Western Ontario), A. Neeman (Australian National U.)
- 6/19-6/24 Groups, Graphs and Stochastic Processes: M. Abert (Chicago), B. Virag (Toronto)
- 6/26-7/1 L-packets: C. Cunningham (Calgary), C. Moeglin (Paris 6), V. Vatsal (UBC)

JULY

- 7/3-7/8 Emerging Challenges at the Interface of Mathematics, Environmental Science and Spatial Eco: M. Lewis (Alberta), S. Cantrell (Miami), R. Holt (Florida)
- 7/10-7/15 Summer School: Advanced Mathematical Methods to Study Atmospheric Dynamical Processes and Predictability: I. Szunyogh (Texas A & M), C. Bishop (Navy Research Lab, Monterey), S. Jones (Karlsruhe), T. Jung (European Centre for Medium-Range Weather Forecasts), O. Talagrand (ENS, Paris), H. Wernli (ETH, Zurich)
- 7/17-7/22 Geometric Properties of Solutions of Nonlinear PDEs and Their Applications: P. Guan (McGill), A. Colesanti (Firenze), V. Ferone (Naples), P. Salani (Firenze)
- 7/24-7/29 Localized Multi-Dimensional Patterns in Dissipative Systems: Theory, Modeling, and Experiments: M. Ward (UBC), B. Deconinck (Washington), A. Doelman (Leiden), E. Knobloch (UC, Berkeley), Y. Nishiura (Hokkaido), B. Sandstede (Brown)
- 7/31-8/5 Mathematical Biology of the Cell: Cytoskeleton and Motility: D. Sept (Michigan), A. Carlsson (Washington U., Missouri), A. Dawes (Alberta), L. Keshet (UBC)

AUGUST

- 8/7-8/12 Twenty-five Years of Representation Theory of Quantum Groups: N. Guay (Alberta), P. Etingof (MIT), V. Ginzburg (Chicago), D. Hernandez (CNRS), A. Savage (Ottawa)
- 8/14-8/19 Algebraic Structure in Network Information Theory: M. Gastpar (UC, Berkeley), F. Kschischang (Toronto)
- 8/21-8/26 Crossing Numbers Turn Useful: G. Salazar (U. A. de San Luis Potosi), D. Archdeacon (Vermont), L. Szekely (South Carolina)
- 8/21-8/26 Self Adjoint Extensions and Singularity Resolution in String Theory and Quantum Gravity: R. Brandenberger (McGill), W. Craig (McMaster), T. Thiemann (Einstein Inst., Golm), N. Turok (Perimeter Inst.), M. Van Raamsdonk (UBC)
- 8/28-9/2 Geometry for Anatomy: G. Hamarneh (SFU), S. Pizer (North Carolina, Chapel Hill), H. Zhang (SFU)

SEPTEMBER

- 9/4-9/9 Cluster Algebras, Representation Theory, and Poisson Geometry: T. Brustle (Sherbrooke), C. Geiss (UNAM), M. Shapiro (Michigan State), H. Thomas (New Brunswick)
- 9/11-9/16 Stochasticity in Biochemical Reaction Networks: B. Munsky (Los Alamos), S. Lampoudi (UC, San Diego), D. Thorsley (Washington), A. Walczak (Princeton)
- 9/18-9/23 Foundations of Stochastic Analysis: Z.-Q. Chen (Washington), T. Kumagai (RIMS, Kyoto)
- 9/25-9/30 Almost Periodic Order: Spectral, Dynamical, and Stochastic Approaches: D. Damanik (Rice), M. Baake (Bielefeld), D. Lenz (U. Jena)

OCTOBER

- 10/2-10/7 Proof Complexity: A. Kolokolova (Memorial), S. Buss (UC, San Diego), S. Cook (Toronto), T. Pitassi (Toronto), P. Pudlak (Academy of Sciences, Prague)
- 10/9-10/14 High Dimensional Probability: J. Rosinski (Tennessee), R. M. Dudley (MIT), C. Houdre (Georgia Tech), J. Wellner (Washington)
- 10/16-10/21 New Recursion Formulae and Integrability for Calabi-Yau Spaces: M. Mulase (UC, Davis), V. Bouchard (Alberta), T. Coates (Imperial College), E. Previato (Boston U.), J. Zhou (Tsinghua)
- 10/23-10/28 Information Theory and Statistics for Large Alphabets: M. Madiman (Yale), A. Orłitsky (UC, San Diego), N.P. Santhanam (U. Hawaii, Manoa), B. Szegedy (Toronto), K. Viswanathan (HP Lab, Palo Alto), A. Wagner (Cornell)
- 10/30-11/4 Cycles on Modular Varieties: M. Greenberg (Calgary), P. Charollois (U. Paris 6), S. Dasgupta (UC, Santa Cruz), B. Gross (Harvard)

NOVEMBER

- 11/6-11/11 WIN 2: Women in Numbers 2: C. David (Concordia), M. Lalin (Alberta), M. Manes (Hawaii)
- 11/13-11/18 Diophantine Methods, Lattices, and Arithmetic Theory of Quadratic Forms: L. Fukshansky (Claremont McKenna College), W.K. Chan (Wesleyan), R. Schulze-Pillot (U. des Saarlandes), J. Vaaler (U. Texas, Austin)
- 11/20-11/25 Black Holes: New Horizons: V. Frolov (Alberta), S.P. Kim (Kunsan University), D. Page (Alberta), M. Sasaki (Kyoto)
- 11/27-12/2 Approximation Algorithms and the Hardness of Approximation: M.R. Salavatipour (Alberta), C. Chekuri (U. Illinois, Urbana-Champaign), C. Joseph (Waterloo), R. O'Donnell (Carnegie Mellon), D. Williamson (Cornell)

DECEMBER

- 12/4-12/9 Hodge Theory and String Duality: C. Doran (Alberta), A. Clingher (U. Missouri, St. Louis), M. Kerr (Durham), J. Walcher (CERN)
- 12/4-12/9 Mathematics: Muse, Maker, and Measure of the Arts: Y. Wang (Michigan State), I. Daubechies (Princeton), S. Hughes (U. Colorado, Boulder), R. Moody (Victoria), D. Rockmore (Dartmouth College)
- 12/11-12/16 Current Challenges in Statistical Learning: X. Shen (Minnesota), H. Chipman (Acadia), R. Tibshirani (Stanford), J. Verducci (Ohio State), J. Zhu (Michigan), M. Zhu (Waterloo)

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