



2025

Banff Calendar



JANUARY

1/5 - 1/10 Mechanistic Learning as a combination of Machine Learning and Modeling in Mathematical Oncology: Sarah Brünink (ETH Zurich), Renee Brady-Nicholls (H. Lee Moffitt Cancer Center & Research Institute), Kathleen Wilkie (Toronto Metropolitan U.)

1/12 - 1/17 Prospects for the String Axiverse: Naomi Gendler (Harvard U.), Michele Cicoli (U. Bologna), David Marsh (King's College London), Liam McAllister (Cornell U.)

1/19 - 1/24 Lattice Theory: Nathan Williams (UT - Dallas), Emily Barnard (DePaul U.), Cesar Ceballos (Graz U. Technology), Colin Defant (Harvard U.), Osamu Iyama (U. Tokyo)

1/26 - 1/31 Perspectives on Markov Numbers: Jonah Gaster (U. Wisconsin - Milwaukee), Elena Fuchs (UC - Davis), Didac Martinez-Granado (U. Luxembourg), Michelle Rabideau (U. Hartford)

FEBRUARY

2/2 - 2/7 Operator Systems and their Applications: Sarah Plosker (Brandon U.), Douglas Farenick (U. Regina), Priyanga Ganesan (UC - San Diego), Evgenios Kakariadis (Newcastle U.), Ivan Todorov (U. Delaware)

2/9 - 2/14 Exact Solutions in Quantum Information: Entanglement, Topology, and Quantum Circuits: Robert Konik (Brookhaven National Lab), Aditi Mitra (NYU), Sara Murciano (Caltech), Giuseppe Mussardo (Scuola Internazionale di Studi Avanzati), Jesko Sirker (U. Manitoba)

2/16 - 2/21 Uncertainty Quantification in Neural Network Models: Habib Najm (Sandia National Laboratories), Prasanna Balaprakash (Oak Ridge National Laboratory), Roger Ghanem (USC), Serge Prudhomme (Polytechnique Montréal), Yue Yu (Lehigh U.)

2/23 - 2/28 Emerging Statistical Methods for Digital Health Data: Vadim Zippunnikov (Johns Hopkins U.), Linda Valeri (Columbia U.), Julian Wolfson (U. Minnesota)

MARCH

3/2 - 3/7 Dynamic Allocation and Matching: Yehua Wei (Duke U.), Azarakhsh Malekian (U. Toronto), Weina Wang (Carnegie Mellon U.)

3/9 - 3/14 Efficient Approximate Bayesian Inference: Sean Plummer (U. Arkansas), Debdeep Pati (Texas A&M U.), Dootika Vats (Indian Institute of Technology Kanpur), Yun Yang (UIUC), Shuang Zhou (Arizona State U.)

3/16 - 3/21 Geometric Mechanics Formulations for Continuum Mechanics: Christopher Eldred (Sandia National Laboratories), Elena Celledoni (Norwegian U. Science and Technology), Artur Palha (Delft U. Technology), Vakhtang Putkaradze (U. Alberta)

3/23 - 3/28 Women in Noncommutative Algebra and Representation Theory 4: Lilit Martirosyan (UNC - Wilmington), Darlayne Addabbo (U. Arizona), Ellen Kirkman (Wake Forest U.), Maitreyee Kulkarni (North Carolina State U.)

3/30 - 4/4 Representation Theory, Symplectic Geometry, and Cluster Algebras: Ryan Kinser (U. Iowa), Eleonore Faber (U. Leeds/U. Graz), Ralf Schiffler (U. Connecticut), Melissa Sherman-Bennett (MIT)

APRIL

4/6 - 4/11 Challenges, Opportunities, and New Horizons in Rational Approximation: Heather Wilber (U. Washington), Anil Damle (Cornell U.), Serkan Gugercin (Virginia Tech)

4/13 - 4/18 Interactions of Geometric and Quantum Topology Focused on Links in Thickened Surfaces: Hans Boden (McMaster U.), Patricia Cahn (Smith College), Efstratia Kalfagianni (Michigan State U.), Ilya Kofman (College of Staten Island & The Graduate Center, CUNY), Alice Kwon (SUNY Maritime College)

4/20 - 4/25 Frontiers in Quantum Cryptography: New Functionalities, Primitives, and Foundations: Henry Yuen (Columbia U.), Zvika Brakerski (Weizmann Institute of Science), Yael Kalai (Microsoft and MIT)

4/27 - 5/2 Advances in Stochastic Control and Reinforcement Learning: Yufei Zhang (Imperial College London), Xin Guo (UC - Berkeley), Lukasz Szpruch (U. Edinburgh), Renyuan Xu (USC), Thaleia Zariphopoulou (UT - Austin)

MAY

5/4 - 5/9 NC Function Theory: The non-Commutative Frontier of Analysis and Algebra: Robert T.W. Martin (U. Manitoba), Kenneth Davidson (U. Waterloo), Quanlei Fang (CUNY), Eli Shamovich (Ben-Gurion U. Negev), Jurij Volcic (Drexel U.)

5/11 - 5/16 Strategies for Handling Applications with Nonconvexity: Heinz Bauschke (UBC - Okanagan), Radu Bot (U. Vienna), Regina Burachik (U. South Australia), Walaa Moursi (U. Waterloo)

5/18 - 5/23 Emerging Connections between Reaction-Diffusion, Branching Processes, and Biology: Christopher Henderson (U. Arizona), Julien Berestycki (U. Oxford), Vincent Calvez (CNRS), Jessica Lin (McGill U.), Sarah Penington (U. Bath)

5/25 - 5/30 MJO Predictability: Its Sources and Limits: Chidong Zhang (NOAA), Falko Judt (NCAR), Boualem Khouider (U. Victoria), Hyemi Kim (Ewha Womans U.)

JUNE

6/1 - 6/6 Proof Representations: From Theory to Applications: Elaine Pimentel (UCL), Carlos Areces (U. Nacional de Córdoba), Anupam Das (U. Birmingham), Lutz Strassburger (Inria)

6/8 - 6/13 Women in Analysis (WoAN): Irina Mitrea (Temple U.), Donatella Danielli (Arizona State U.), Maria Soria Carro (Rutgers U.)

6/15 - 6/20 Women in Groups, Geometry, and Dynamics III: Kasia Jankiewicz (UC - Santa Cruz), Tullia Dymarz (U. Wisconsin - Madison), Sara Maloni (U. Virginia), Jing Tao (U. Oklahoma)

6/15 - 6/20 The Math Bundle: Edward Doolittle (First Nations U. Canada), Betty McKenna (First Nations U. Canada), Florence Glanfield (U. Alberta)

6/22 - 6/27 Efficient and Reliable Deep Learning Methods and their Scientific Applications: Jack Xin (UC - Irvine), Andrea Bertozzi (UCLA), Gitta Kutyniok (LMU Munich), Stanley Osher (UCLA), Bao Wang (U. Utah)

6/29 - 7/4 Wasserstein Gradient Flows in Math and Machine Learning: Soumik Pal (U. Washington - Seattle), Young-Heon Kim (UBC), Anna Korba (ENSAE/CREST), Brendan Pass (U. Alberta)

JULY

7/6 - 7/11 Particulates across Scales: Mathematical Modeling, Computation, and Applications: Daisuke Takagi (U. Hawaii - Manoa), James Feng (UBC), Zahra Niroobakhsh (U. Missouri - Kansas City), Johan Remmelgas (RCPE GmbH)

7/13 - 7/18 Novel Statistical Approaches for Studying Multi-omics Data: Jingjing Yang (Emory U.), Sarah Gagliano Taliun (U. Montréal), Mingyao Li (U. Pennsylvania), Christine Peterson (U. Texas MD Anderson Cancer Center), Xiang Zhou (U. Michigan)

7/20 - 7/25 Recent Developments in Logarithmic Conformal Field Theory: Florencia Oros Hunziker (U. Colorado - Boulder), Thomas Creutzig (U. Alberta), Sergei Gukov (Caltech), Shashank Kanade (U. Denver), Andrew Linshaw (U. Denver)

7/27 - 8/1 Directions in Aperiodic Order: Reem Yassawi (Queen Mary U. London), David Damanik (Rice U.), Natalie Frank (Vassar College), Neil Mañibo (Bielefeld U.), Nicolae Strungaru (MacEwan U.)

AUGUST

8/3 - 8/8 Isogeny Graphs in Cryptography: Travis Morrison (Virginia Tech), Victoria de Quehen (InfoSec Global), Jason LeGrow (Virginia Polytechnic Institute and State U.), Chloe Martindale (U. Bristol)

8/10 - 8/15 Cycle Representatives in Applied Homological Algebra: Lori Ziegelmeier (Macalester College), Chad Giusti (Oregon State U.), Gregory Henselman-Petrusek (Pacific Northwest National Laboratory)

8/17 - 8/22 Foundation Models and their Biomedical Applications: Dehan Kong (U. Toronto), Yong Chen (U. Pennsylvania), Linglong Kong (U. Alberta), Katarzyna Reluga (U. Bristol), Hongtu Zhu (UNC - Chapel Hill)

8/24 - 8/29 Novel Mathematical Paradigm for Phylogenomics: Nadia El-Mabrouk (U. Montreal), Katharina Huber (U. East Anglia), Manuel Lafond (U. Sherbrooke), Guillaume Scholz (U. Leipzig)

8/31 - 9/5 Stochastic Reinforcement Processes: Mark Holmes (U. Melbourne), Omer Angel (UBC), Roland Bauerschmidt (NYU), Silke Rolles (Technische U. München)

SEPTEMBER

9/7 - 9/12 Finite Geometry and Ramsey Theory: Anurag Bishnoi (Delft U. Technology), Simeon Ball (U. Politècnica Catalunya), David Conlon (Caltech), Patrick Morris (U. Politecnica de Catalunya), Valentina Pepe (Sapienza, U. Rome), Liana Yepremyan (Emory U.)

9/14 - 9/19 Singularities, D-modules, and Connections to Physics: Uli Walther (Purdue U.), Christine Berkesch (U. Minnesota), Linquan Ma (Purdue U. / IAS), Claudia Miller (Syracuse U.), Sebastian Olano (U. Toronto)

9/21 - 9/26 Kähler Geometry: Past, Present and Future: Song Sun (UC - Berkeley), Jingrui Cheng (Stony Brook U.), Weiyong He (U. Oregon), Eveline Legendre (Universite Lyon 1), Sean Paul (U. Wisconsin - Madison)

9/28 - 10/3 Arithmetic Geometry and Algebraic Groups: Igor Rapinchuk (Michigan State U.), Vladimir Chernousov (U. Alberta), Evangelia Gazaki (U. Virginia), Raman Parimala (Emory U.)

OCTOBER

10/5 - 10/10 Notions of Singularity in Different Characteristics: Javier Carvajal-Rojas (CIMAT), Jenny Kenkel (Grinnell College), Karl Schwede (U. Utah), Lisa Seccia (Max Planck Institute), Matteo Varbaro (U. Genova)

10/12 - 10/17 Algebraic Graph Theory and Applications: Ada Chan (York U.), Gabriel Coutinho (U. Federal de Minas Gerais), Chris Godsil (U. Waterloo), Hanmeng Zhan (Worcester Polytechnic Institute)

10/19 - 10/24 New Synergies in Partial Differential Equations: Claudio Muñoz (U. Chile), Miguel Angel Alejo (U. Córdoba), Lucrezia Cossetti (U. Pais Vasco), María Ángeles García-Ferrero (U. Barcelona), Felipe Poblete (U. Austral de Chile)

10/26 - 10/31 Emerging Synergies between Stochastic Analysis and Statistical Mechanics: Raluca Balan (U. Ottawa), Ivan Corwin (Columbia U.), Mickey Salins (Boston U.), Samy Tindel (Purdue U.), Xuan Wu (UIUC)

NOVEMBER

11/2 - 11/7 Bridging the Inter-Disciplinary Gap in the Mathematical Modeling of Social Phenomena: Giulia De Pasquale (ETH Zurich), Yibei Chen (MIT), Robin Delabays (U. Applied Sciences and Arts of Western Switzerland / HES-SO), Florian Dörfler (ETH Zurich), Harry Yaojun Yan (Texas A&M U.)

11/9 - 11/14 Polymer Modelling and DNA Topology: Christine Soteros (U. Saskatchewan), Javier Arsuaga (UC - Davis), Eleni Panagiotou (Arizona State U.), Koya Shimokawa (Ochanomizu U.)

11/16 - 11/21 New Trends in Elliptic and Parabolic Equations: Michel Chipot (U. Zurich), Elaine Crooks (Swansea U.), Yihong Du (U. New England), Changfeng Gui (UT - San Antonio), Wenxian Shen (Auburn U.)

11/23 - 11/28 Infinite Structural Ramsey Theory: Jan Hubicka (Charles U.), Natasha Dobrinen (U. Notre Dame), Stevo Todorčević (U. Toronto), Andy Zucker (U. Waterloo)

11/30 - 12/5 Operator Algebraic Quantum Groups: Michael Brannan (U. Waterloo), Benjamin Anderson-Sackaney (U. Caen - Normandy), Martijn Caspers (TU Delft), Lyudmila Turowska (Chalmers U. Technology/ U. Gothenburg), Mateusz Wasilewski (Polish Academy of Sciences)

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