

Mon, Jul 28	Session
08:00–17:30	Registration Desk Open ()
08:45–09:00	Conference Opening (HH Auditorium)
09:00–10:00	Plenary Talk by Rohan Sawhney (HH Auditorium)
10:00–10:30	Coffee Break (HH Lobby)
10:30–12:30	Track A: Stochastic Computation and Complexity, Part I (HH Auditorium)
10:30–12:30	Track B: Domain Uncertainty Quantification (HH Ballroom)
10:30–12:30	Track C: Nested expectations: models and estimators, Part I (PH Auditorium)
10:30–12:30	Track D: Hardware or Software for (Quasi-)Monte Carlo Algorithms, Part I (WH Auditorium)
10:30–12:30	Track E: Technical Session 1 - Markov Chain Monte Carlo (HH Alumni Lounge)
12:30–14:00	Lunch Break ()
14:00–15:00	Plenary Talk by Christiane Lemieux, U of Waterloo, Golden ratio nets and sequences (HH Auditorium)
15:00–15:30	Coffee Break (HH Lobby)
15:30–17:30	Track F: Stochastic Computation and Complexity, Part II (HH Auditorium)
15:30–17:30	Track G: Recent advances in optimization under uncertainty (HH Ballroom)
15:30–17:30	Track H: Computational Methods for Low-discrepancy Sampling and Applications (PH Auditorium)
15:30–17:30	Track I: Technical Session 4 - Quasi-Monte Carlo, Part 1 (WH Auditorium)
15:30–17:30	Track J: Technical Session 12 - PDEs (HH Alumni Lounge)
17:30–19:30	Welcome Reception (HH Lobby)

Tue, Jul 29	Session
08:30–17:30	Registration Desk Open (???)
09:00–10:00	Plenary Talk by Peter Glynn, Stanford U, Combining Simulation and Linear Algebra: COSIMLA (HH Auditorium)
10:00–10:30	Coffee Break (HH Lobby)
10:30–12:30	Track A: Stochastic Computation and Complexity, Part III (HH Auditorium)
10:30–12:30	Track B: Next-generation optimal experimental design: theory, scalability, and real world impact: Part I (HH Ballroom)
10:30–12:30	Track C: Heavy-tailed Sampling (PH Auditorium)
10:30–12:30	Track D: Frontiers in (Quasi-)Monte Carlo and Markov Chain Monte Carlo Methods, Part I (WH Auditorium)
10:30–12:30	Track E: Technical Session 2 - Bayesian Methods (HH Alumni Lounge)
12:30–14:00	Lunch Break ()
14:00–15:00	Plenary Talk by Roshan Joseph, Georgia Institute of Technology, Sensitivity and Screening: From Monte Carlo to Experimental Design ()
15:00–15:30	Coffee Break (HH Lobby)
15:30–17:30	Track F: Stochastic Computation and Complexity, Part IV (HH Auditorium)
15:30–17:30	Track G: Next-generation optimal experimental design: theory, scalability, and real world impact: Part II (HH Ballroom)
15:30–17:30	Track H: Advances in Rare Events Simulation (PH Auditorium)
15:30–17:30	Track I: Frontiers in (Quasi-)Monte Carlo and Markov Chain Monte Carlo Methods, Part II (WH Auditorium)
15:30–17:30	Track J: Technical Session 5 - Quasi-Monte Carlo, Part 2 (HH Alumni Lounge)

Wed, Jul 30	Session
08:30–16:30	Registration Desk Open ()
09:00–10:00	Plenary Talk by Michaela Szölgvényi, U of Klagenfurt, An optimal transport approach to quantifying model uncertainty of SDEs (HH Auditorium)
10:00–10:30	Coffee Break (HH Lobby)
10:30–12:30	Track A: Stochastic Computation and Complexity, Part V (HH Auditorium)
10:30–12:30	Track B: Statistical Design of Experiments (HH Ballroom)
10:30–12:30	Track C: Advances in Adaptive Hamiltonian Monte Carlo (PH Auditorium)
10:30–12:30	Track D: Technical Session 15 - Simulation (WH Auditorium)
10:30–12:30	Track E: Technical Session 6 - Sampling (HH Alumni Lounge)
12:30–14:00	Lunch Break ()
14:00–16:00	Track F: Stochastic Optimization (HH Auditorium)
14:00–16:00	Track G: Recent Progress on Algorithmic Discrepancy Theory and Applications (HH Ballroom)
14:00–16:00	Track H: Monte Carlo Applications in High-performance Computing, Computer Graphics, and Computational Science (PH Auditorium)
14:00–16:00	Track I: Technical Session 16 - Statistics (WH Auditorium)
14:00–16:00	Track J: Technical Session 10 - Langevin (HH Alumni Lounge)
16:00–16:30	Coffee Break (HH Lobby)
18:00–20:30	Conference Dinner (Bridgeport Arts Center)

Thu, Jul 31	Session
08:30–17:30	Registration Desk Open (???)
09:00–10:00	Plenary Talk by Uros Seljak, UC Berkeley, Gradient-Based MCMC Sampling: Methods and Optimization Strategies (HH Auditorium)
10:00–10:30	Coffee Break (HH Lobby)
10:30–12:30	Track A: QMC and Applications Part I (HH Auditorium)
10:30–12:30	Track B: Analysis of Langevin and Related Sampling Algorithms, Part I (HH Ballroom)
10:30–12:30	Track C: Nested expectations: models and estimators, Part II (PH Auditorium)
10:30–12:30	Track D: Technical Session 8 - Finance (WH Auditorium)
10:30–12:30	Track E: Technical Session 13 - ML & Optimization (HH Alumni Lounge)
12:30–14:00	Lunch Break ()
14:00–15:00	Plenary Talk by Nicolas Chopin, Institut Polytechnique de Paris, Saddlepoint Monte Carlo and its application to exact ecological inference (HH Auditorium)
15:00–15:30	Coffee Break (HH Lobby)
15:30–17:30	Track F: QMC and Applications Part II (HH Auditorium)
15:30–17:30	Track G: Analysis of Langevin and Related Sampling Algorithms, Part II (HH Ballroom)
15:30–17:30	Track H: Recent Advances in Stochastic Gradient Descent (PH Auditorium)
15:30–17:30	Track I: Technical Session 7 - Sampling (WH Auditorium)
15:30–17:30	Track J: Technical Session 11 - SDEs (HH Alumni Lounge)
18:00–20:30	Steering Committee Meeting (by invitation) ()

Fri, Aug 1	Session
08:30–12:15	Registration Desk Open (???)
09:00–10:30	Track A: Forward and Inverse Problems for Stochastic Reaction Networks (HH Auditorium)
09:00–10:30	Track B: Hardware or Software for (Quasi-)Monte Carlo Algorithms, Part II (HH Ballroom)
09:00–10:30	Track C: Technical Session 3 - Simulation (PH Auditorium)
09:00–10:30	Track D: Technical Session 9 - Sampling (WH Auditorium)
09:00–10:30	Track E: Technical Session 14 - Markov Chain Monte Carlo (HH Alumni Lounge)
10:30–11	Coffee Break (HH Lobby)
11:00–12:00	Plenary Talk by Veronika Ročková, U of Chicago, AI-Powered Bayesian Inference (HH Auditorium)
12:00–12:15	Closing Remarks ()

Jul 28, 2025 – Morning

08:00–17:30	Registration Desk Open			
08:45–09:00	Conference Opening			
9:00 – 10:00	Plenary Talk: <i>Rohan Sawhney</i> , p. ?? Chair:			
10:00–10:30	Coffee Break			
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10:30–12:30	<i>Andreas Neuenkirch</i> , A strong order 1.5 boundary preserving discretization scheme for scalar SDEs defined in a domain, p. 72	<i>André-Alexander Zepernick</i> , Domain UQ for stationary and time-dependent PDEs using QMC, p. 74	<i>Abdul Lateef Haji Ali</i> , An Adaptive Sampling Algorithm for Level-set Approximation, p. 77	HH Alumni Lounge Track E: Technical Session 1 - Markov Chain Monte Carlo Chair: <i>TBD</i>
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10:30–12:30	<i>Verena Schwarz</i> , Stong order 1 adaptive approximation of jump-diffusion SDEs with discontinuous drift, p. 73	<i>Jürgen Dölz</i> , Quantifying uncertainty in spectral clusterings: expectations for perturbed and incomplete data, p. 76	<i>Vinh Hoang</i> , Posterior-Free A-Optimal Bayesian Design of Experiments via Conditional Expectation, p. 78	<i>Ruben Seyer</i> , Creating rejection-free samplers by rebalancing skew-balanced jump processes, p. 139
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10:30–12:30			<i>Chung Ming Loi</i> , Scalable and User-friendly QMC Sampling with UMBridge, p. 82	

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12:30–14:00	Lunch Break				
14:00–15:00	Plenary Talk: <i>Christiane Lemieux, U of Waterloo, Golden ratio nets and sequences</i> , p. 22 Chair:				
15:00–15:30	Coffee Break				
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17:30–19:30	Welcome Reception				

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10:30–12:30	<i>Noufel Frikha</i> , On the convergence of the Euler-Maruyama scheme for McKean-Vlasov SDEs, p. 91	<i>Adrien Corenflos</i> , A recursive Monte Carlo approach to optimal Bayesian experimental design, p. 94	<i>Federica Milinanni</i> , A large deviation principle for Metropolis-Hastings sampling, p. 96		<i>Hamza Ruzaygat</i> , Bayesian Anomaly Detection in Variable-Order and Variable-Diffusivity Fractional Mediums, p. 142
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12:30–14:00	Lunch Break				
14:00–15:00	Plenary Talk: <i>Roshan Joseph, Georgia Institute of Technology, Sensitivity and Screening: From Monte Carlo to Experimental Design</i> , p. 24 Chair:				
15:00–15:30	Coffee Break				
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Jul 30, 2025 – Morning

08:30–16:30	Registration Desk Open				
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10:00–10:30	Coffee Break				
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	<i>Shane Henderson</i> , A New Convergence Analysis of Two Stochastic Frank-Wolfe Algorithms, p. 116	<i>Peng Zhang</i> , Improving the Design of Randomized Experiments via Discrepancy Theory, p. 117	<i>Silei Song</i> , WoS-NN: Collaborating Walk-on-Spheres with Machine Learning to Solve Ellip- tic PDEs, p. 119	<i>Carles Domingo-Enrich</i> , Cheap permutation testing , p. 184	<i>Sara Pérez-Vieites</i> , Langevin-based strategies for nested particle filters, p. 166
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10:00–10:30	Coffee Break				
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14:00–15:00	Plenary Talk: <i>Nicolas Chopin, Institut Polytechnique de Paris, Saddlepoint Monte Carlo and its application to exact ecological inference</i> , p. 28 Chair:					
15:00–15:30	Coffee Break					
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15:30–17:30	<i>Art Owen</i> , Randomized QMC with one categorical variable, p. 127	<i>Yifan Chen</i> , Convergence of Unadjusted Langevin in High Dimensions: Delocalization of Bias, p. 129	<i>Jing Dong</i> , Stochastic Gradient Descent with Adaptive Data, p. 132	<i>Sascha Holl</i> , Concatenation of Markov processes for Monte Carlo Integration, p. 157	<i>Riccardo Saporiti</i> , Comparing Probabilistic Load Forecasters: Stochastic Differential Equations and Deep Learning, p. 169	
15:30–17:30	<i>Zexin Pan</i> , QMC confidence intervals using quantiles of randomized nets, p. 128	<i>Fuzhong Zhou</i> , Entropy methods for the delocalization of bias in Langevin Monte Carlo, p. 130		<i>Josephine Westermann</i> , Polynomial approximation for efficient transport-based sampling, p. 159	<i>Leon Wilkosz</i> , Forward Propagation of Low Discrepancy Through McKean–Vlasov Dynamics: From QMC to MLQMC, p. 170	
15:30–17:30	<i>Kosuke Suzuki</i> , Quasi-uniform quasi-Monte Carlo lattice point sets, p. 128	<i>Siddharth Mitra</i> , Convergence of Φ -Divergence and Φ -Mutual Information Along Langevin Markov Chains, p. 130		<i>Soumyadip Ghosh</i> , Fast Approximate Matrix Inversion via MCMC for Linear System Solvers, p. 159		
18:00–20:30	Steering Committee Meeting (by invitation)					

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09:00–10:30	<i>Zhou Fang</i> , Fixed-budget simulation method for growing cell populations, p. 132	<i>Niklas Baumgarten</i> , A High-performance Multi-level Monte Carlo Software for Full Field Estimates and Applications in Optimal Control, p. ??	<i>Yashveer Kumar</i> , Monte Carlo simulation approach to solve distributed order fractional mathematical model, p. 145	<i>Nicola Branchini</i> , Revisiting self-normalized importance sampling: new methods and diagnostics, p. 163	<i>Kevin Bitterlich</i> , Delayed Acceptance Slice Sampling: A Two-Level method for Improved Efficiency in High-Dimensional Settings , p. 177
09:00–10:30	<i>Sophia Munker</i> , Dimensionality Reduction for Efficient Rare Event Estimation, p. 133	<i>Aleksei Sorokin</i> , Fast Gaussian Processes, p. 135	<i>Serena Fattori</i> , Benchmarking the Geant4-DNA 'UHDR' Example for Monte Carlo Simulation of pH Effects on Radiolytic Species Yields Using a Mesoscopic Approach, p. 145	<i>Daniel Yukimura</i> , Quantitative results on sampling from quasi-stationary distributions, p. 164	<i>Reuben Cohn-Gordon</i> , Gradient-based MCMC in high dimensions, p. 178
09:00–10:30	<i>Maksim Chapin</i> , Filtered Markovian Projection: Dimensionality Reduction in Filtering for Stochastic Reaction Networks, p. 134	<i>Johannes Krotz</i> , Hybrid Monte Carlo methods for kinetic transport, p. 136	<i>Toon Ingelaere</i> , Multilevel simulation of ensemble Kalman methods: interactions across levels, p. 147	<i>Amit Subrahmanya</i> , Serial ensemble filtering with marginal coupling, p. 165	<i>Philip Schaer</i> , Parallel Affine Transformation Tuning: Drastically Improving the Effectiveness of Slice Sampling, p. 179
09:00–10:30	<i>Muruhan Rathinam</i> , State and parameter inference in stochastic reaction networks, p. 135		<i>Muhammad Noor ul Amin</i> , Adaptive Max-EWMA Control Chart with SVR: Monte Carlo Simulation for Run Length Analysis, p. 147		<i>Annabelle Carrell</i> , Low-Rank Thinning, p. 180
	Coffee Break				
11:00–12:00	Plenary Talk: <i>Veronika Ročková, U of Chicago, AI-Powered Bayesian Inference</i> , p. 30				
12:00–12:15	Closing Remarks				