

Mon, Jul 28	Session
08:00–17:30	Registration Desk Open (HH Lobby)
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 (HH Lobby)
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 (HH Lobby)
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 (HH Lobby)
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 (HH Lobby)
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 (HH Auditorium)

Mon, Jul 28, 2025 – Morning

08:00–17:30	Registration Desk Open			
08:45–09:00	Conference Opening by Fred Hickernell, HH Auditorium			
9:00 – 10:00	Plenary Talk: <i>Rohan Sawhney</i> , p. ?? Chair:			
10:00–10:30	Coffee Break			
	Special Session,HH Auditorium Track A: Stochastic Computation and Complexity, Part I p. ?? Chair: <i>TBD</i>	Special Session,HH Ballroom Track B: Domain Uncertainty Quantification p. ?? Chair: <i>TBD</i>	Special Session,PH Auditorium Track C: Nested expectations: models and estimators, Part I p. ?? Chair: <i>TBD</i>	Special Session,WH Auditorium Track D: Hardware or Software for (Quasi-)Monte Carlo Algorithms, Part I p. ?? Chair: <i>TBD</i>
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. ??	<i>André-Alexander Zepernick</i> , Domain UQ for stationary and time-dependent PDEs using QMC, p. ??	<i>Abdul Lateef Haji Ali</i> , An Adaptive Sampling Algorithm for Level-set Approximation, p. ??	HH Alumni Lounge Track E: Technical Session 1 - Markov Chain Monte Carlo Chair: <i>TBD</i>
10:30–12:30	<i>Christopher Rauhögger</i> , An adaptive Milstein-type method for strong approximation of systems of SDEs with a discontinuous drift coefficient, p. ??	<i>Carlos Jerez-Hanckes</i> , Domain Uncertainty Quantification for Electromagnetic Wave Scattering via First-Order Sparse Boundary Element Approximation, p. ??	<i>Sebastian Krumscheid</i> , Double-loop randomized quasi-Monte Carlo estimator for nested integration, p. ??	<i>Zhihao Wang</i> , Stereographic Multi-Try Metropolis Algorithms for Heavy-tailed Sampling, p. ??
10:30–12:30	<i>Verena Schwarz</i> , Stong order 1 adaptive approximation of jump-diffusion SDEs with discontinuous drift, p. ??	<i>Jürgen Dölz</i> , Quantifying uncertainty in spectral clusterings: expectations for perturbed and incomplete data, p. ??	<i>Vinh Hoang</i> , Posterior-Free A-Optimal Bayesian Design of Experiments via Conditional Expectation, p. ??	<i>Ruben Seyer</i> , Creating rejection-free samplers by rebalancing skew-balanced jump processes, p. ??
10:30–12:30		<i>Harri Hakula</i> , Model Problems for PDEs on Uncertain Domains, p. ??	<i>Mike Giles</i> , CUDA implementation of MLMC on NVIDIA GPUs, p. ??	<i>Philippe Gagnon</i> , Theoretical guarantees for lifted samplers, p. ??
10:30–12:30			<i>Chung Ming Loi</i> , Scalable and User-friendly QMC Sampling with UMBridge, p. ??	

Mon, Jul 28, 2025 – Afternoon

12:30–14:00	Lunch Break				
14:00–15:00	HH Auditorium	Plenary Talk: <i>Christiane Lemieux, U of Waterloo, Golden ratio nets and sequences</i> , p. ?? Chair: <i>Nathan Kirk</i>			
15:00–15:30	Coffee Break				
	Special Session,HH Auditorium Track F: Stochastic Computation and Complexity, Part II p. ?? Chair: <i>TBD</i>	Special Session,HH Ballroom Track G: Recent advances in optimization under uncertainty p. ?? Chair: <i>TBD</i>	Special Session,PH Auditorium Track H: Computational Methods for Low-discrepancy Sampling and Applications p. ?? Chair: <i>TBD</i>	WH Auditorium Track I: Technical Session 4 - Quasi-Monte Carlo, Part 1 Chair: <i>TBD</i>	HH Alumni Lounge Track J: Technical Session 12 - PDEs Chair: <i>TBD</i>
15:30–17:30	<i>Michael Gnewuch</i> , Optimality of deterministic and randomized QMC-cubatures on several scales of function spaces, p. ??	<i>Tapio Helin</i> , Stability of Expected Utility in Bayesian Optimal Experimental Design, p. ??	<i>François Clément</i> , Searching Permutations for Constructing Low-Discrepancy Point Sets and Investigating the Kritzing Sequence, p. ??	<i>Christian Weiss</i> , Halton Sequences, Scrambling and the Inverse Star-Discrepancy, p. ??	<i>Adrien Richou</i> , A probabilistic Numerical method for semi-linear elliptic Partial Differential Equations, p. ??
15:30–17:30	<i>Kateryna Pozharska</i> , Optimal designs for function discretization and construction of tight frames, p. ??	<i>Karina Koval</i> , Subspace accelerated measure transport methods for fast and scalable sequential experimental design, p. ??	<i>Nathan Kirk</i> , Minimizing the Stein Discrepancy, p. ??	<i>Xiaoda Xu</i> , Star discrepancy and uniform approximation under weighted simple and stratified random sampling, p. ??	<i>Abdugabar Rasulov</i> , Monte Carlo method for the Spatially Homogenous Boltzmann equation, p. ??
15:30–17:30	<i>Leszek Plaskota</i> , Complexity of approximating piecewise smooth functions in the presence of deterministic or random noise, p. ??	<i>Johannes Milz</i> , Randomized quasi-Monte Carlo methods for risk-averse stochastic optimization, p. ??	<i>Makram Chahine</i> , Improving Efficiency of Sampling-based Motion Planning via Message-Passing Monte Carlo, p. ??	<i>Sifan Liu</i> , Transport Quasi-Monte Carlo, p. ??	<i>Miguel Alvarez</i> , A New Approach for Unbiased Estimation of Parameters of Partially Observed Diffusions, p. ??
15:30–17:30		<i>Arved Bartuska</i> , Efficient expected information gain estimators based on the randomized quasi-Monte Carlo method, p. ??	<i>Gregory Seljak</i> , An Empirical Evaluation of Robust Estimators for RQMC, p. ??	<i>Ambrose Emmett-Iwaniw</i> , Using Normalizing Flows for Efficient Quasi-Random Sampling for Copulas, p. ??	<i>Håkon Hoel</i> , High-order adaptive methods for exit times of diffusion processes and reflected diffusions, p. ??
17:30–19:30	Welcome Reception				

Tue, Jul 29, 2025 – Morning

08:30–17:30	Registration Desk Open				
09:00–10:00	HH Auditorium				
10:00–10:30	Plenary Talk: <i>Peter Glynn, Stanford U, Combining Simulation and Linear Algebra: COSIMLA</i> , p. ?? Chair: <i>Chang-Han Rhee</i> Coffee Break				
	Special Session,HH Auditorium Track A: Stochastic Computation and Complexity, Part III p. ?? Chair: <i>TBD</i>	Special Session,HH Ballroom Track B: Next-generation optimal experimental design: theory, scalability, and real world impact: Part I p. ?? Chair: <i>TBD</i>	Special Session,PH Auditorium Track C: Heavy-tailed Sampling p. ?? Chair: <i>TBD</i>	Special Session,WH Auditorium Track D: Frontiers in (Quasi-)Monte Carlo and Markov Chain Monte Carlo Methods, Part I p. ?? Chair: <i>TBD</i>	HH Alumni Lounge Track E: Technical Session 2 - Bayesian Methods Chair: <i>TBD</i>
10:30–12:30	<i>Jean-François Chassagneux</i> , Computing the stationary measure of McKean-Vlasov SDEs, p. ??	<i>Xun Huan</i> , Optimal Pilot Sampling for Multi-fidelity Monte Carlo Methods, p. ??	<i>Sebastiano Grazi</i> , Parallel computations for Metropolis Markov chains Based on Picard maps, p. ??	<i>Hwanwoo Kim</i> , Enhancing Gaussian Process Surrogates for Optimization and Posterior Approximation via Random Exploration, p. ??	<i>Lorenzo Nagar</i> , Optimizing Generalized Hamiltonian Monte Carlo for Bayesian Inference applications, p. ??
10:30–12:30	<i>Noufel Frikha</i> , On the convergence of the Euler-Maruyama scheme for McKean-Vlasov SDEs, p. ??	<i>Adrien Corenflos</i> , A recursive Monte Carlo approach to optimal Bayesian experimental design, p. ??	<i>Federica Milinanni</i> , A large deviation principle for Metropolis-Hastings sampling, p. ??		<i>Hamza Ruzaygat</i> , Bayesian Anomaly Detection in Variable-Order and Variable-Diffusivity Fractional Mediums, p. ??
10:30–12:30	<i>Sotirios Sabanis</i> , Wasserstein Convergence of Score-based Generative Models under Semiconvexity and Discontinuous Gradients, p. ??	<i>Ayoub Belhadji</i> , Weighted quantization using MMD: From mean field to mean shift via gradient flows, p. ??	<i>Xingyu Wang</i> , Sharp Characterization and Control of Global Dynamics of SGDs with Heavy Tails, p. ??		<i>Arghya Datta</i> , Theoretical Guarantees of Mean Field Variational Inference for Bayesian Principal Component Analysis, p. ??
10:30–12:30					<i>Jimmy Lederman</i> , Bayesian Analysis of Latent Underdispersion Using Discrete Order Statistics, p. ??

Tue, Jul 29, 2025 – Afternoon

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. ?? Chair: <i>Simon Mak</i>				
15:00–15:30	Coffee Break				
	Special Session,HH Auditorium	Special Session,HH Ballroom	Special Session,PH Auditorium	Special Session,WH Auditorium	HH Alumni Lounge
	Track F: Stochastic Computation and Complexity, Part IV, p. ?? Chair: <i>TBD</i>	Track G: Next-generation optimal experimental design: theory, scalability, and real world impact: Part II p. ?? Chair: <i>TBD</i>	Track H: Advances in Rare Events Simulation p. ?? Chair: <i>TBD</i>	Track I: Frontiers in (Quasi-)Monte Carlo and Markov Chain Monte Carlo Methods, Part II p. ?? Chair: <i>TBD</i>	Track J: Technical Session 5 - Quasi-Monte Carlo, Part 2 Chair: <i>TBD</i>
15:30–17:30	<i>Larisa Yaroslavtseva</i> , Optimal strong approximation of SDEs with Hölder continuous drift coefficient, p. ??	<i>Alen Alexanderian</i> , Goal Oriented Sensor Placement for Infinite-Dimensional Bayesian Inverse Problems, p. ??	<i>Victor Elvira</i> , Multiple Importance Sampling for Rare Event Simulation in Communication Systems, p. ??	<i>Takashi Goda</i> , Quasi-uniform quasi-Monte Carlo digital nets, p. ??	<i>Peter Kritzer</i> , Approximation using median lattice algorithms, p. ??
15:30–17:30	<i>Gunther Leobacher</i> , Tractability of L_2 -approximation and integration in weighted Hermite spaces of finite smoothness, p. ??	<i>jacopo iollo</i> , Diffusion-Based Bayesian Experimental Design: Advancing BED for Practical Applications, p. ??	<i>Bruno Tuffin</i> , Asymptotic robustness of smooth functions of rare-event estimators, p. ??	<i>Ziang Niu</i> , Boosting the inference for generative models by (Quasi-)Monte Carlo resampling, p. ??	<i>Yang Liu</i> , Convergence Rates of Randomized Quasi-Monte Carlo Methods under Various Regularity Conditions, p. ??
15:30–17:30	<i>Alexander Steinicke</i> , Malliavin differentiation of Lipschitz SDEs and BSDEs and an Application to Quadratic Forward-Backward SDEs, p. ??	<i>Tommie Catanach</i> , Robust Bayesian Optimal Experimental Design under Model Misspecification, p. ??	<i>Eya Ben Amar</i> , Importance Sampling Methods with Stochastic Differential Equations for the Estimation of the Right Tail of the CCDF of the Fade Duration, p. ??	<i>Chenyang Zhong</i> , A hit and run approach for sampling and analyzing ranking models, p. ??	<i>Jakob Dilen</i> , Use of rank-1 lattices in the Fourier neural operator, p. ??
15:30–17:30			<i>Shyam Mohan Subbiah Pillai</i> , Estimating rare event probabilities associated with McKean–Vlasov SDEs, p. ??		<i>Aadit Jain</i> , Investigating the Optimum RQMC Batch Size for Betting and Empirical Bernstein Confidence Intervals, p. ??

Wed, Jul 30, 2025 – Morning

08:30–16:30	Registration Desk Open				
09:00–10:00	HH Auditorium				
Plenary Talk: <i>Michaela Szölgényi, U of Klagenfurt, An optimal transport approach to quantifying model uncertainty of SDEs</i> , p. ?? Chair: <i>Gunther Leobacher</i>					
10:00–10:30	Coffee Break				
	Special Session,HH Auditorium Track A: Stochastic Computation and Complexity, Part V, p. ?? Chair: <i>TBD</i>	Special Session,HH Ballroom Track B: Statistical Design of Experiments p. ?? Chair: <i>TBD</i>	Special Session,PH Auditorium Track C: Advances in Adaptive Hamiltonian Monte Carlo p. ?? Chair: <i>TBD</i>	WH Auditorium Track D: Technical Session 15 - Simulation Chair: <i>TBD</i>	HH Alumni Lounge Track E: Technical Session 6 - Sampling Chair: <i>TBD</i>
10:30–12:30	<i>Stefan Heinrich</i> , On the quantum complexity of parametric integration in Sobolev spaces, p. ??	<i>Simon Mak</i> , Respecting the boundaries: Space-filling designs for surrogate modeling with boundary information, p. ??	<i>Bob Carpenter</i> , GIST: Gibbs self-tuning for locally adapting Hamiltonian Monte Carlo, p. ??	<i>Philippe Blondeel</i> , Combining quasi-Monte Carlo with Stochastic Optimal Control for Trajectory Optimization of Autonomous Vehicles in Mine Counter Measure Simulations, p. ??	<i>Akash Sharma</i> , Sampling with constraints, p. ??
10:30–12:30	<i>Bernd Kiefer</i> model, Quantum Integration in Tensor Product Besov Spaces, p. ??	<i>Chih-Li Sung</i> , Stacking designs: designing multi-fidelity computer experiments with target predictive accuracy, p. ??	<i>Nawaf Bou-Rabee</i> , Acceleration of the No-U-Turn Sampler, p. ??	<i>Rino Persiani</i> , A Monte Carlo Approach to Designing a Novel Sample Holder for Enhanced UV-Vis Spectroscopy, p. ??	<i>Joonha Park</i> , Sampling from high-dimensional, multimodal distributions using automatically tuned, tempered Hamiltonian Monte Carlo, p. ??
10:30–12:30	<i>Nikolaos Makras</i> , Taming the Interacting Particle Langevin Algorithm — The Superlinear Case, p. ??	<i>Qian Xiao</i> , Optimal design of experiments with quantitative-sequence factors, p. ??	<i>Chirag Modi</i> , ATLAS: Adapting Trajectory Lengths and Step-Size for Hamiltonian Monte Carlo, p. ??	<i>Prasanth Shyamsundar</i> , ARCANÉ Reweighting: A technique to tackle the sign problem in the simulation of collider events in high energy physics, p. ??	<i>Arne Bouillon</i> , Localized consensus-based sampling for non-Gaussian distributions, p. ??
10:30–12:30	<i>Iosif Lytras</i> , Sampling with Langevin Dynamics from non-smooth and non-logconcave potentials., p. ??	<i>Chaofan Huang</i> , Factor Importance Ranking and Selection using Total Indices, p. ??	<i>Trevor Campbell</i> , AutoStep: Locally adaptive involutive MCMC, p. ??	<i>Nicole Aretz</i> , Multifidelity and Surrogate Modeling Approaches for Uncertainty Quantification in Ice Sheet Simulations, p. ??	<i>Alex Shkolnik</i> , Importance Sampling for Hawkes Processes, p. ??

Wed, Jul 30, 2025 – Afternoon

12:30–14:00	Lunch Break				HH Alumni Lounge	
	Special Session,HH Auditorium Track F: Stochastic Optimization p. ?? Chair: <i>TBD</i>	Special Session,HH Ballroom Track G: Recent Progress on Algorithmic Discrepancy Theory and Applications p. ?? Chair: <i>TBD</i>	Special Session,PH Auditorium Track H: Monte Carlo Applications in High-performance Computing, Computer Graphics, and Computational Science p. ?? Chair: <i>TBD</i>	WH Auditorium Track I: Technical Session 16 - Statistics Chair: <i>TBD</i>	Track J: Technical Session 10 - Langevin Chair: <i>TBD</i>	
14:00–16:00	<i>Raghu Bollapragada</i> , Monte Carlo Based Adaptive Sampling Approaches for Stochastic Optimization, p. ??	<i>Haotian Jiang</i> , Algorithmic Discrepancy Theory: An Overview, p. ??	<i>Arash Fahim</i> , Gaining efficiency in Monte Carlo policy gradient methods for stochastic optimal control, p. ??	<i>Kazeem Adeleke</i> , Empirical Statistical Comparative Analysis of SNP Heritability Estimators and Gradient Boosting Machines (GBM) Using Genetic Data from the UK Biobank, p. ??	<i>Attila Lovaas</i> , Stochastic gradient Langevin dynamics with non-stationary data, p. ??	
14:00–16:00	<i>Shane Henderson</i> , A New Convergence Analysis of Two Stochastic Frank-Wolfe Algorithms, p. ??	<i>Peng Zhang</i> , Improving the Design of Randomized Experiments via Discrepancy Theory, p. ??	<i>Silei Song</i> , WoS-NN: Collaborating Walk-on-Spheres with Machine Learning to Solve Ellip- tic PDEs, p. ??	<i>Carles Domingo-Enrich</i> , Cheap permutation testing , p. ??	<i>Sara Pérez-Vieites</i> , Langevin-based strategies for nested particle filters, p. ??	
14:00–16:00		<i>Aleksandar Nikolov</i> , Online Factorization for Online Discrepancy Minimization, p. ??		<i>Christopher Draper</i> , Moving PCG beyond LOGs, p. ??		
14:00–16:00				<i>Yiming Xu</i> , Hybrid least squares for learning functions from highly noisy data, p. ??		
16:00–16:30	Coffee Break					
18:00–20:30	Conference Dinner					

Thu, Jul 31, 2025 – Morning

08:30–17:30	Registration Desk Open				
09:00–10:00	HH Auditorium				
	Plenary Talk: <i>Uros Seljak, UC Berkeley, Gradient-Based MCMC Sampling: Methods and Optimization Strategies</i> , p. ?? Chair: <i>Tim Hobbs</i>				
10:00–10:30	Coffee Break				
	Special Session, HH Auditorium Track A: QMC and Applications Part I p. ?? Chair: <i>TBD</i>	Special Session, HH Ballroom Track B: Analysis of Langevin and Related Sampling Algorithms, Part I p. ?? Chair: <i>TBD</i>	Special Session, PH Auditorium Track C: Nested expectations: models and estimators, Part II p. ?? Chair: <i>TBD</i>	WH Auditorium Track D: Technical Session 8 - Finance Chair: <i>TBD</i>	HH Alumni Lounge Track E: Technical Session 13 - ML & Optimization Chair: <i>TBD</i>
10:30–12:30	<i>Felix Bartel</i> , Exact discretization, tight frames and recovery via D-optimal designs, p. ??	<i>Krishnakumar Balasubramanian</i> , Finite-Particle Convergence Rates for Stein Variational Gradient Descent, p. ??	<i>RAUL TEMPONE</i> , Multilevel randomized quasi-Monte Carlo estimator for nested expectations, p. ??	<i>Matyokub Bakoev</i> , The Stochastic Differential Equations of the Heston Model for Option Pricing, p. ??	<i>Frédéric Blondeel</i> , Learning cooling strategies in simulated annealing through binary interactions, p. ??
10:30–12:30	<i>Mou Cai</i> , L2-approximation: using randomized lattice algorithms and QMC hyperinterpolation, p. ??	<i>Lihan Wang</i> , Convergence rates of kinetic Langevin dynamics with weakly confining potentials, p. ??	<i>Matteo Raviola</i> , Stochastic gradient with least-squares control variates, p. ??	<i>Vincent Zhang</i> , Characterizing Efficacy of Geometric Brownian Motion Expectation-based Simulations on Low-Volatility American Common Stocks, p. ??	<i>Du Ouyang</i> , Accuracy of Discretely Sampled Stochastic Policies in Continuous-Time Reinforcement Learning, p. ??
10:30–12:30	<i>Zhijian He</i> , High-dimensional density estimation on unbounded domain, p. ??	<i>Peter Whalley</i> , Randomized Splitting Methods and Stochastic Gradient Algorithms, p. ??	<i>Philipp Guth</i> , A one-shot method for Bayesian optimal experimental design, p. ??	<i>Hao Quan</i> , Efficient Pricing for Variable Annuity via Simulation, p. ??	<i>Wei Cai</i> , Martingale deep neural networks for quasi-linear PDEs and stochastic optimal controls in 10,000 dimensions, p. ??
10:30–12:30	<i>Frances Y. Kuo</i> , Application of QMC to Oncology, p. ??	<i>Xiaoou Cheng</i> , Delocalization of Bias in Unadjusted Hamiltonian Monte Carlo, p. ??			<i>Yiqing Zhou</i> , Minimizing Functions with Sparse Samples: A Fast Interpolation Approach, p. ??

Thu, Jul 31, 2025 – Afternoon

12:30–14:00	Lunch Break					
14:00–15:00	HH Auditorium	Plenary Talk: <i>Nicolas Chopin, Institut Polytechnique de Paris, Saddlepoint Monte Carlo and its application to exact ecological inference</i> , p. ?? Chair: <i>Bruno Tuffin</i>				
15:00–15:30	Coffee Break					
	Special Session,HH Auditorium Track F: QMC and Applications Part II p. ?? Chair: <i>TBD</i>	Special Session,HH Ballroom Track G: Analysis of Langevin and Related Sampling Algorithms, Part II p. ?? Chair: <i>TBD</i>	Special Session,PH Auditorium Track H: Recent Advances in Stochastic Gradient Descent p. ?? Chair: <i>TBD</i>	WH Auditorium Track I: Technical Session 7 - Sampling Chair: <i>TBD</i>	HH Alumni Lounge Track J: Technical Session 11 - SDEs Chair: <i>TBD</i>	
15:30–17:30	<i>Dirk Nuyens</i> , Approximation of multivariate periodic functions, p. ??	<i>Molei Tao</i> , Langevin-Based Sampling under Nonconvex Constraints, p. ??	<i>Jose Blanchet</i> , Inference for Stochastic Gradient Descent with Infinite Variance, p. ??	<i>Kun-Lin Kuo</i> , Revisiting the Gibbs Sampler: A Conditional Modeling Perspective, p. ??	<i>Fabio Zoccolan</i> , Dynamical Low-Rank Approximation for SDEs: an interacting particle-system ROM, p. ??	
15:30–17:30	<i>Art Owen</i> , Randomized QMC with one categorical variable, p. ??	<i>Yifan Chen</i> , Convergence of Unadjusted Langevin in High Dimensions: Delocalization of Bias, p. ??	<i>Jing Dong</i> , Stochastic Gradient Descent with Adaptive Data, p. ??	<i>Sascha Holl</i> , Concatenation of Markov processes for Monte Carlo Integration, p. ??	<i>Riccardo Saporiti</i> , Comparing Probabilistic Load Forecasters: Stochastic Differential Equations and Deep Learning, p. ??	
15:30–17:30	<i>Zexin Pan</i> , QMC confidence intervals using quantiles of randomized nets, p. ??	<i>Fuzhong Zhou</i> , Entropy methods for the delocalization of bias in Langevin Monte Carlo, p. ??		<i>Josephine Westermann</i> , Polynomial approximation for efficient transport-based sampling, p. ??	<i>Leon Wilkosz</i> , Forward Propagation of Low Discrepancy Through McKean–Vlasov Dynamics: From QMC to MLQMC, p. ??	
15:30–17:30	<i>Kosuke Suzuki</i> , Quasi-uniform quasi-Monte Carlo lattice point sets, p. ??	<i>Siddharth Mitra</i> , Convergence of Φ -Divergence and Φ -Mutual Information Along Langevin Markov Chains, p. ??		<i>Soumyadip Ghosh</i> , Fast Approximate Matrix Inversion via MCMC for Linear System Solvers, p. ??		
18:00–20:30	Steering Committee Meeting (by invitation)					

Fri, Aug 1, 2025

08:30–12:15	Registration Desk Open				
	Special Session,HH Auditorium Track A: Forward and Inverse Problems for Stochastic Reaction Networks p. ?? Chair: <i>TBD</i>	Special Session,HH Ballroom Track B: Hardware or Software for (Quasi-)Monte Carlo Algorithms, Part II p. ?? Chair: <i>TBD</i>	PH Auditorium Track C: Technical Session 3 - Simulation Chair: <i>TBD</i>	WH Auditorium Track D: Technical Session 9 - Sampling Chair: <i>TBD</i>	HH Alumni Lounge Track E: Technical Session 14 - Markov Chain Monte Carlo Chair: <i>TBD</i>
09:00–10:30	<i>Zhou Fang</i> , Fixed-budget simulation method for growing cell populations, p. ??	<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. ??	<i>Nicola Branchini</i> , Revisiting self-normalized importance sampling: new methods and diagnostics, p. ??	<i>Kevin Bitterlich</i> , Delayed Acceptance Slice Sampling: A Two-Level method for Improved Efficiency in High-Dimensional Settings , p. ??
09:00–10:30	<i>Sophia Munker</i> , Dimensionality Reduction for Efficient Rare Event Estimation, p. ??	<i>Aleksei Sorokin</i> , Fast Gaussian Processes, p. ??	<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. ??	<i>Daniel Yukimura</i> , Quantitative results on sampling from quasi-stationary distributions, p. ??	<i>Reuben Cohn-Gordon</i> , Gradient-based MCMC in high dimensions, p. ??
09:00–10:30	<i>Maksim Chapin</i> , Filtered Markovian Projection: Dimensionality Reduction in Filtering for Stochastic Reaction Networks, p. ??	<i>Johannes Krotz</i> , Hybrid Monte Carlo methods for kinetic transport, p. ??	<i>Toon Ingelaere</i> , Multilevel simulation of ensemble Kalman methods: interactions across levels, p. ??	<i>Amit Subrahmanya</i> , Serial ensemble filtering with marginal coupling, p. ??	<i>Philip Schaer</i> , Parallel Affine Transformation Tuning: Drastically Improving the Effectiveness of Slice Sampling, p. ??
09:00–10:30	<i>Muruhan Rathinam</i> , State and parameter inference in stochastic reaction networks, p. ??		<i>Muhammad Noor ul Amin</i> , Adaptive Max-EWMA Control Chart with SVR: Monte Carlo Simulation for Run Length Analysis, p. ??		<i>Annabelle Carrell</i> , Low-Rank Thinning, p. ??
Coffee Break					
11:00–12:00	HH Auditorium				
12:00–12:15	Plenary Talk: <i>Veronika Ročková, U of Chicago, AI-Powered Bayesian Inference</i> , p. ?? Chair: <i>Art Owen</i>				
	Closing Remarks by TBD, HH Auditorium				