

**Stein's Method: The Golden Anniversary
(13 Jun 2022–08 Jul 2022)
Workshop on Statistical and Machine Learning**



*[Registration](#) is required for this program.

Venue

27 - 30 June:
IMS Auditorium

01 July:
S16-03-05/06 (6 Science Drive 2, S117546)



ORGANIZING COMMITTEE

Co-Chairs

Larry Goldstein (University of Southern California)

Adrian Röllin (National University of Singapore)

Members

Andrew Barbour (Universität Zürich)

Louis Chen (National University of Singapore)

Peter Eichelsbacher (Ruhr-Universität Bochum)

Max Fathi (Université de Paris)

Qiang Liu (University of Texas at Austin)

Lester Mackey (Stanford University)

Giovanni Peccati (Université du Luxembourg)

Nicolas Privault (Nanyang Technological University)

Gesine Reinert (University of Oxford)

Nathan Ross (The University of Melbourne)

Qi-Man Shao (Southern University of Science and Technology)

Aihua Xia (The University of Melbourne)

Workshop on Statistical and Machine Learning (27 June to 1 July 2022)

27 - 30 June: IMS Auditorium
01 July: S16-03-05/06 (6 Science Drive 2, S117546)

Monday, 27 June 2022		
Time	Title	Speaker
0915–0930	Registration	
0930–1015	Motif counting via subgraph sampling	Sumit Mukherjee Columbia University, USA
1015–1045	<i>Tea Break</i>	
1045–1130	Efron-Stein inequalities for random matrices	Daniel Paulin The University of Edinburgh, Scotland
1130–1330	<i>Lunch Break</i>	
1330–1415	Normal approximation for associated point processes with applications to fire incident simulation using permanental Cox processes	Nathakhun Wiroonsri King Mongkut's University of Technology Thonburi, Thailand
1415–1445	<i>Tea Break</i>	
1445–1530	Stein's method and moment duality for two-island model approximations	Han Liang Gan Waikato University, New Zealand
Tuesday, 28 June 2022		
Time	Title	Speaker
0915–0930	Registration	
0930–1015	Gaussian process approximation using Stein's method, with applications to queues	Nathan Ross The University of Melbourne, Australia
1015–1045	<i>Tea Break</i>	
1045–1130	Probabilistic interpretation of a theorem of Kolmogorov using the zero bias transformation	Uwe Schmock Vienna University of Technology, Austria
1130–1330	<i>Lunch Break</i>	
1330–1415	How good is your Bayesian CLT? Finite-sample error bounds for a variety of useful divergences	Mikolaj Kasprzak Université du Luxembourg, Luxembourg

Wednesday, 29 June 2022		
Time	Title	Speaker
0910–0930	Registration	
0930–1015	Relative goodness-of-fit tests for models with latent variables	Arthur Gretton Gatsby Computational Neuroscience Unit, UK
1015–1045	<i>Tea Break</i>	
1045–1130	Testing goodness of fit of conditional density models with kernels	Wittawat Jitkrittum Google Research, USA
1130–1330	<i>Lunch Break</i>	
1330–1530	Excursion	

Thursday, 30 June 2022		
Time	Title	Speaker
0915–0930	Registration	
0930–1015	Regularized Stein variational gradient descent and Langevin dynamics	Krishna Balasubramanian University of California, Davis, USA
1015–1045	<i>Tea Break</i>	
1045–1130	Geometry, characteristicness, and weak convergence control of Stein kernels	Alessandro Barp University of Cambridge, UK Alan Turing Institute, UK
1130–1330	<i>Lunch Break</i>	
1330–1415	Representation learning in two-layer neural networks	Murat A. Erdogdu University of Toronto, Canada
1415–1445	<i>Tea Break</i>	
1445–1530	Sampling with constraints using Stein variational gradient descent and Langevin dynamics	Xin Tong National University of Singapore, Singapore

Friday, 01 July 2022		
Time	Title	Speaker
0915–0930	Registration	
0930–1015	Gaussian variational inference with Wasserstein gradient flows (Lambert et al. 2022)	Adil Salim Microsoft Research, USA
1015–1045	<i>Tea Break</i>	
1045–1130	Stein kernels, functional inequalities and applications in statistics.	Adrien Saumard ENSAI Bruz, France
1130–1330	<i>Lunch Break</i>	

Friday, 01 July 2022		
Time	Title	Speaker
1330–1400	A unifying view on kernelised Stein discrepancy tests for goodness-of-fit	Wenkai Xu University of Oxford, UK
1400–1430	Stein's Method for Poisson-Exponential Distributions	Anum Fatima University of Oxford, UK
1430–1530	Short Talks	

This schedule is accurate as of 27 June. It is subjected to changes.