

Stein's Method: The Golden Anniversary (13 Jun 2022–08 Jul 2022)

Name and Affiliation	Talk Title
Krishnakumar Balasubramanian University of California, Davis, USA	Regularized Stein variational gradient descent and Langevin dynamics (Video)
Alessandro Barp University of Cambridge and Alan Turing Institute, UK	Geometry, characteristicness, and weak convergence control of Stein kernels (Video)
Carina Betken Ruhr-Universität Bochum, Germany	Central limit theory and variance asymptotics for Poisson cylinder processes (Video)
Chinmoy Bhattacharjee University of Southern California, USA	Gaussian approximation for region-stabilizing functionals and its applications (Video)
Louis Chen National University of Singapore, Singapore	Somerecollections and reflections on Stein's method of normal approximation (Video)
Laure Coutin Université Paul Sabatier, France	Normalized Poisson martingale Vs brownian motion in Wasserstein 1 distance (Video)
Laurent Decreasefond Telecom Paris - LINCSE, France	Applications of the functional Stein's method (Video)
Hanna Döring University of Osnabrück, Germany	Asymptotics of dynamic Boolean models (Video)
Murat A. Erdogdu University of Toronto, Canada	Representation learning in two-layer neural networks (Video)
Max Fathi Université Paris Cité, France	Stability of the sharp spectral gap bound for positively curved manifolds via Stein's method (Video)
Anum Fatima Oxford University, UK	Stein's method for Poisson-Exponential distributions (Video)
Han Liang Gan Waikato University, New Zealand	Stein's method and moment duality for two-island model approximations (Video)
Arthur Gretton Gatsby Computational Neuroscience Unit, UK	Relative goodness-of-fit tests for models with latent variables (Video)

Name and Affiliation	Talk Title
Christian Houdré Georgia Institute of Technology, USA	Covariance representation, Stein's kernels and high dimensional CLTs (Video)
Arturo Jaramillo Center of Research in Mathematics, Mexico	Quantitative Erdős-Kac theorem for additive functions (Video)
Wittawat Jitkrittum Google Research, USA	Testing goodness of fit of conditional density models with kernels (Video)
Mikolaj Kasprzak Université du Luxembourg, Luxembourg	How good is your Bayesian CLT? Finite-sample error bounds for a variety of useful divergences (Video)
Sumit Mukherjee Columbia University, USA	Motif counting via subgraph sampling (Video)
Daniel Paulin The University of Edinburgh, Scotland	Efron-Stein inequalities for random matrices (Video)
Guillaume Poly Université de Rennes 1, France	On central limit theorems of "Salem-Zygmund" type (Video)
Nicolas Privault Nanyang Technological University, Singapore	Berry-Esseen bounds for functionals of independent random variables (Video)
Adrian Röllin National University of Singapore, Singapore	Higher order fluctuations in dense random graph models (Video)
Nathan Ross The University of Melbourne, Australia	Gaussian process approximation using Stein's method, with applications to queues (Video)
Adil Salim Microsoft Research, USA, China	Gaussian variational inference with Wasserstein gradient flows (Lambert et al. 2022) (Video)
Adrien Saumard ENSAI Bruz, France	Stein kernels, functional inequalities and applications in statistics (Video)
Uwe Schmock Vienna University of Technology, Austria	Probabilistic interpretation of a theorem of Kolmogorov using the zero bias transformation (Video)
Matthias Schulte Hamburg University of Technology, Germany	Multivariate normal approximation of stabilising functionals of Poisson processes (Video)

Name and Affiliation	Talk Title
Yvik Swan Université libre de Bruxelles, Belgium	Comparison of Stein operators with two applications (Video)
Tadas Temcinas University of Oxford, UK	Multivariate central limit theorems for random clique complexes (Video)
Anna Paola Todino Ruhr-Universität Bochum, Germany	Stein's method for Gaussian approximations of random spherical Eigenfunctions (Video)
Xin Tong National University of Singapore, Singapore	Sampling with constraints using Stein variational gradient descent and Langevin dynamics (Video)
Nathakhun Wiroonsri King Mongkut's University of Technology Thonburi, Thailand	Normal approximation for associated point processes with applications to fire incident simulation using permanent Cox processes (Video)
Wenkai Xu University of Oxford, UK	A unifying view on kernelised Stein discrepancy tests for goodness-of-fit (Video)
Xiaochuan Yang Brunel University London, UK	Random coverage of a manifold with boundary (Video)