

IMS Young Mathematical Scientists Forum — Statistics and Data Science
(24 Nov 2025–28 Nov 2025)



Organizing Committee

Co-chairs

Adrian Röllin

Alexandre Thiéry

Members

Bibhas Chakraborty

Alexander Giessing

Cheng Li

Jialiang Li

Zhenhua Lin

Yingcun Xia

National University of Singapore

Venue

IMS Executive Seminar Room

Bock S17, Level 3

10 Lower Kent Ridge Rd Singapore 119076

For more information: https://ims.nus.edu.sg/events/ims_forum2025_stats/

IMS Young Mathematical Scientists Forum — Statistics and Data Science

(24 Nov 2025–28 Nov 2025)

Monday, 24 November 2025

Time	Title	Speaker
0900–0930	Registration	
0930–1000	Geodesic Causal Inference	Yidong Zhou <i>University of California, Davis, USA</i>
1000–1030	Doubly Robust Inference on Causal Derivative Effects for Continuous Treatments	Yikun Zhang <i>University of Washington, USA</i>
1030–1100	<i>Coffee Break</i>	
1100–1130	Regularizing Extrapolation in Causal Inference	Harsh Parikh <i>Yale University, USA</i>
1130–1200	Unifying Regression-based and Design-based Causal Inference in Time-series Experiments	Zhexiao Lin <i>University of California, Berkeley, USA</i>
1200–1330	<i>Lunch Break</i>	
1330–1400	Sampling as Bandits: Evaluation-Efficient Design for Black-Box Densities	Takuo Matsubara <i>The University of Edinburgh, UK</i>
1400–1430	A Computable Measure of Suboptimality for Entropy-Regularised Variational Objectives	Heishiro Kanagawa <i>Newcastle University, UK</i>
1430–1630	<i>Free Discussion</i>	

Tuesday, 25 November 2025

Time	Title	Speaker
0915–0930	Registration	
0930–1000	Adaptive Transfer Clustering: A Unified Framework	Zhongyuan Lyu <i>The University of Sydney, Australia</i>
1000–1030	Efficient Data Integration Under Prior Probability Shift	Ming-Yueh Huang <i>Academia Sinica, Taipei</i>
1030–1100	<i>Coffee Break</i>	
1100–1130	Divide-and-shrink: An Efficient and Heterogeneity-agnostic Approach for Transfer Estimation	Ruoyu Wang <i>Harvard T.H. Chan School of Public Health, USA</i>
1130–1200	Combining Evidence Across Filtrations	Yo Joong Choe <i>INSEAD Singapore, Singapore</i>

Tuesday, 25 November 2025		
Time	Title	Speaker
1200–1330	<i>Lunch Break</i>	
1330–1400	Recent Advances of the Fingerprinting Method in Private and Adaptive Data Analysis	Xin Lyu <i>University of California, Berkeley, USA</i>
1400–1430	Shifted Composition IV: Toward Ballistic Acceleration for Log-Concave Sampling	Matthew S. Zhang <i>University of Toronto, Canada</i>
1430–1630	<i>Free Discussion</i>	

Wednesday, 26 November 2025		
Time	Title	Speaker
0915–0930	Registration	
0930–1000	When Does Adaptive Experimentation Permit Valid Inference?	Koulik Khamaru <i>Rutgers University, USA</i>
1000–1030	Optimal Assortment Inference within an Online Learning Framework	Shuting Shen <i>National University of Singapore, Singapore</i>
1030–1100	<i>Coffee Break</i>	
1100–1130	Representation Learning for Healthcare Data Analysis	Doudou Zhou <i>National University of Singapore, Singapore</i>
1130–1200	Universal Log-optimality for General Classes of E-processes and Sequential Hypothesis Tests	Ian Waudby-Smith <i>University of California, Berkeley, USA</i>
1200–1330	<i>Lunch Break</i>	

Thursday, 27 November 2025		
Time	Title	Speaker
0915–0930	Registration	
0930–1000	Extreme Value Theory for Singular Subspace Estimation in the Matrix Denoising Model	Joshua Cape <i>University of Wisconsin-Madison, USA</i>
1000–1030	HeteroJIVE: Weighted Spectral Estimation for Shared Subspace Recovery under Multi-View Heteroskedasticity	Jingyang Li <i>University of Michigan, USA</i>
1030–1100	<i>Coffee Break</i>	
1100–1130	Doubly Robust Calibration of Prediction Sets under Covariate Shift	Yachong Yang <i>University of Pennsylvania, USA</i>

Thursday, 27 November 2025		
Time	Title	Speaker
1130–1200	Bridging Root-n and Non-standard Asymptotics: Adaptive Inference in M-Estimation	Kenta Takatsu <i>Carnegie Mellon University, USA</i>
1200–1330	<i>Lunch Break</i>	
1330–1400	Estimating Generalization Error for Iterative Algorithms in High-Dimensional Regression	Kai Tan <i>Stanford University, USA</i>
1400–1430	Specialization after Generalization: Towards Understanding Test-Time Training in Foundation Models	Gil Kur <i>ETH Zürich, Switzerland</i>
1430–1500	<i>Coffee Break</i>	
1500–1530	Bagging Regularized M-estimators: Precise Asymptotics and Cross-validation	Pratik Patil <i>University of California, Berkeley, USA</i>
1530–1600	The Computational Advantage of Depth: Learning High-Dimensional Hierarchical Functions with Gradient Descent	Yatin Dandi <i>Ecole Polytechnique Fédérale de Lausanne, Switzerland</i>
1600–1650	<i>Free Discussion</i>	
1650	<u><i>Conference Dinner</i></u> By Invitation Only 1-way transfer from IMS to Jumbo is provided. JUMBO Seafood Riverwalk 20 Upper Circular Rd, #B1-48, The Riverwalk, Singapore 058416	
Friday, 28 November 2025		
Time	Title	Speaker
0915–0930	Registration	
0930–1000	Root Cause Discovery via Permutations and Cholesky Decomposition	Jinzhou Li <i>National University of Singapore, Singapore</i>
1000–1030	Algorithmic Pursuit of Causality	Yihong Gu <i>Princeton University, USA</i>
1030–1100	<i>Coffee Break</i>	
1100–1130	Generalized Data Thinning Using Sufficient Statistics	Ameer Dharamshi <i>University of Washington, USA</i>
1130–1200	Expected Shortfall Random Forest for Heterogeneous Treatment Effect	Shushu Zhang <i>University of Michigan, USA</i>
1200–1330	<i>Lunch Break</i>	

This schedule is accurate as of 18 Nov 2025.