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

List of Speakers and Talk Titles

Name and Affiliation	Talk Title
Joshua Cape University of Wisconsin-Madison, USA	Extreme Value Theory for Singular Subspace Estimation in the Matrix Denoising Model
Yo Joong Choe INSEAD Singapore, Singapore	Combining Evidence Across Filtrations
Yatin Dandi EPFL, Switzerland	The Computational Advantage of Depth: Learning High-Dimensional Hierarchical Functions with Gradient Descent
Ameer Dharamshi University of Washington, USA	Generalized Data Thinning Using Sufficient Statistics
Yihong Gu Princeton University, USA	Algorithmic Pursuit of Causality
Ming-Yueh Huang Academia Sinica, Taipei	Efficient Data Integration Under Prior Probability Shift
Heishiro Kanagawa Newcastle University, UK	A Computable Measure of Suboptimality for Entropy-Regularised Variational Objectives
Koulik Khamaru Rutgers University, USA	When Does Adaptive Experimentation Permit Valid Inference?
Gil Kur ETH Zürich, Switzerland	Specialization after Generalization: Towards Understanding Test-Time Training in Foundation Models
Jingyang Li University of Michigan, USA	HeteroJIVE: Weighted Spectral Estimation for Shared Subspace Recovery under Multi-View Heteroskedasticity
Jinzhou Li National University of Singapore, Singapore	Root Cause Discovery via Permutations and Cholesky Decomposition
Zhexiao Lin University of California, Berkeley, USA	Unifying Regression-based and Design-based Causal Inference in Time-series Experiments
Xin Lyu University of California, Berkeley, USA	Recent Advances of the Fingerprinting Method in Private and Adaptive Data Analysis
Zhongyuan Lyu The University of Sydney, Australia	Adaptive Transfer Clustering: A Unified Framework

Name and Affiliation	Talk Title
Takuo Matsubara The University of Edinburgh, UK	Sampling as Bandits: Evaluation-Efficient Design for Black-Box Densities
Harsh J. Parikh Yale University, USA	Regularizing Extrapolation in Causal Inference
Pratik Patil University of California, Berkeley, USA	Bagging Regularized M-estimators: Precise Asymptotics and Cross-validation
Shuting Shen National University of Singapore, Singapore	Optimal Assortment Inference within an Online Learning Framework
Kenta Takatsu Carnegie Mellon University, USA	Bridging Root-n and Non-standard Asymptotics: Adaptive Inference in M-Estimation
Kai Tan Stanford University, USA	Estimating Generalization Error for Iterative Algorithms in High-Dimensional Regression
Ruoyu Wang Harvard T.H. Chan School of Public Health, USA	Divide-and-shrink: An Efficient and Heterogeneity-agnostic Approach for Transfer Estimation
Ian Waudby-Smith University of California, Berkeley, USA	Universal Log-optimality for General Classes of E-processes and Sequential Hypothesis Tests
Yachong Yang University of Pennsylvania (Wharton Statistics Department), USA	Doubly Robust Calibration of Prediction Sets under Covariate Shift
Matthew Zhang University of Toronto, Canada	Shifted Composition IV: Toward Ballistic Acceleration for Log-Concave Sampling
Shushu Zhang University of Michigan, USA	Expected Shortfall Random Forest for Heterogeneous Treatment Effect
Yikun Zhang University of Washington, USA	Doubly Robust Inference on Causal Derivative Effects for Continuous Treatments
Doudou Zhou National University of Singapore, Singapore	Representation Learning for Healthcare Data Analysis
Yidong Zhou University of California, Davis, USA	Geodesic Causal Inference