Frontiers of Statistical Network Analysis: Inference, Tensors and Beyond

Higher-order Networks and Tensors and Interface with other research areas

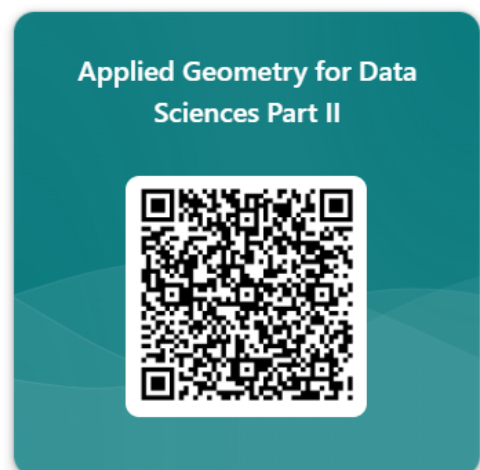(26–30 May 2025)

ORGANIZING COMMITTEE

Jialiang Li
National University of Singapore

Dong Xia
Hong Kong University of Science and Technology

Yuan Zhang
Ohio State University

Scan QR code to register

Applied Geometry for Data Sciences Part II

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/frontiers-of-statistical-network-analysis-inference-tensors-and-beyond

Higher-order Networks and Tensors and Interface with other research areas (26–30 May 2025)

Monday, 26 May 2025

Time	Title	Speaker
0915–0930	Registration	
0930–1030	Online Statistical Inference for Low-Rank Reinforcement Learning	Will Wei Sun *Purdue University, USA*
1030–1045	Coffee Break	
1045–1145	From Score Estimation to Sampling	Harrison Zhou *Yale University, USA*
1145–1400	Lunch Break	
1400–1500	Limit Laws for Gromov-Wasserstein Alignment with Applications to Testing Graph Isomorphisms	Kengo Kato *Cornell University, USA*
1500–1515	Coffee Break	
1515–1615	Theoretical Guarantees for Alternative Least Square Algorithm in Tensor CP Decomposition	Anru Zhang *Duke University, USA*

Tuesday, 27 May 2025

Time	Title	Speaker
0915–0930	Registration	
0930–1030	HNCI: high-dimensional Network Causal Inference	Yingying Fan *University of Southern California, USA*
1030–1045	Coffee Break	
1045–1145	A Regression Tree Approach to Missing Data and Explainable AI	Wei-Yin Loh *University of Wisconsin-Madison, USA*
1145–1400	Lunch Break	
1400–1500	Higher-Order Graphon Theory: Fluctuations, Inference, and Degeneracies	Bhaswar B. Bhattacharya *University of Pennsylvania, USA*
1500–1515	Coffee Break	
1515–1615	Context-dependent and Model-agnostic Network Estimation	Garvesh Raskutti *University of Wisconsin-Madison, USA*

Wednesday, 28 May 2025		
Time	**Title**	**Speaker**
0915–0930	Registration	
0930–1045	Free Discussion	
1045–1145	Semiparametric Modelling and Analysis for Longitudinal Network Data	Yang Feng *New York University, USA*
1145–1400	Lunch Break	
1400	*Social Activity* Group tour to Marina Bay *https://www.visitsingapore.com/neighbourhood/featured-neighbourhood/marina-bay/* *1-way transfer from IMS to Gardens by the Bay Drop-off*	

Thursday, 29 May 2025		
Time	**Title**	**Speaker**
0915–0930	Registration	
0930–1030	Representation Retrieval Learning for Heterogeneous Data Integration	Annie Qu *University of California, Irvine, USA*
1030–1045	Coffee Break	
1045–1145	Tensor Data Analysis and Some Applications in Neuroscience	Lexin Li *University of California, Berkeley, USA*
1145–1400	Lunch Break	
1400–1500	Nonparametric Inference on Network Effects with Dependent Edges: Optimality, Two-sample, Multiple Strata	Wen Zhou *New York University, USA*
1500–1515	Coffee Break	
1515–1615	Heteroskedastic Tensor Clustering	Yuxin Chen *University of Pennsylvania, USA*

Friday, 30 May 2025		
Time	**Title**	**Speaker**
0915–0930	Registration	
0930–1030	Agnostic Characterization of Interference in Randomized Experiments	David S. Choi *Carnegie Mellon University, USA*
1030–1045	Coffee Break	
1045–1145	A Transfer Learning Approach to Precision Matrix Estimation	Mladen Kolar *University of Southern California, USA*
1145–1400	Lunch Break	

Friday, 30 May 2025		
Time	**Title**	**Speaker**
1400–1500	Graph Matrices and Tensor Networks	Aaron Potechin *University of Chicago, USA*
1500–1515	Coffee Break	
1515–1615	Identification and Inference from Cross-sectional Data via Higher Order Cumulants	Niels Richard Hansen *University of Copenhagen, Denmark*

This schedule is accurate as of 21 Apr 2025 and is subjected to changes.