

## Frontiers of Statistical Network Analysis: Inference, Tensors and Beyond (12 May 2025–30 May 2025)

Name and Affiliation	Talk Title
Bhaswar B. Bhattacharya University of Pennsylvania, USA	Higher-Order Graphon Theory: Fluctuations, Inference, and Degeneracies
Jinyuan Chang Southwestern University of Finance and Economics, China	Autoregressive Networks with Dependent Edges
Yuxin Chen University Pennsylvania, USA	Heteroskedastic Tensor Clustering
David S. Choi Carnegie Mellon University, USA	Agnostic Characterization of Interference in Randomized Experiments
Yingying Fan University of Southern California, USA	HNCI: high-dimensional Network Causal Inference
Yang Feng New York University, USA	Semiparametric Modelling and Analysis for Longitudinal Network Data
Subhro Ghosh National University of Singapore, Singapore	Learning with Latent Group Sparsity via Diffusions on Networks
Christophe Giraud Université Paris Saclay, France	Learning Latent Features from Network Data
Niels Richard Hansen University of Copenhagen, Denmark	Identification and Inference from Cross-sectional Data via Higher Order Cumulants
Kengo Kato Cornell University, USA	Limit Laws for Gromov-Wasserstein Alignment with Applications to Testing Graph Isomorphisms
Mladen Kolar University of Southern California, USA	A Transfer Learning Approach to Precision Matrix Estimation
Chenlei Leng The University of Warwick, UK	Statistical Analysis of Reciprocity
Lexin Li University of California, Berkeley, USA	Tensor Data Analysis and Some Applications in Neuroscience
Wei-Yin Loh University of Wisconsin-Madison, USA	A Regression Tree Approach to Missing Data and Explainable AI

Name and Affiliation	Talk Title
Jinchi Lv University of Southern California, USA	ATE-GL: Asymptotic Theory of Eigenvectors for Latent Embeddings with Generalized Laplacian Matrices
Aaron Potechin University of Chicago, USA	Graph Matrices and Tensor Networks
Annie Qu University of California, Irvine, USA	Representation Retrieval Learning for Heterogeneous Data Integration
Garvesh Raskutti University of Wisconsin-Madison, USA	Context-dependent and Model-agnostic Network Estimation
Michael Schweinberger Pennsylvania State University, USA	A Regression Framework for Studying Relationships among Attributes under Network Interference
Dapeng Shi Chinese University of Hong Kong, Hong Kong SAR	A Multilayer Probit Network Model for Community Detection with Dependent Layers
Will Wei Sun Purdue University, USA	Online Statistical Inference for Low-Rank Reinforcement Learning
Miaoyan Wang University of Wisconsin-Madison, USA	Application and Methods for Structured Tensor Learning
Dong Xia University of Hong Kong, Hong Kong SAR	<i>Tutorial</i> Introduction to tensor data analysis
	Online Decision Making: Algorithm, Regret, Constraints and Uncertainty
Qiwei Yao London School of Economics and Political Science, UK	Cointegration Between Two Intrinsically Stationary Spatial Processes
Anru Zhang Duke University, USA	Theoretical Guarantees for Alternative Least Square Algorithm in Tensor CP Decomposition
Emma Jingfei Zhang Emory University, USA	Modelling Non-Uniform Hypergraphs Using Determinantal Point Processes
Jingnan Zhang University of Science and Technology of China, China	A Dynamic Network Autoregressive Model for Time-varying Network-link Data
Yuan Zhang Ohio State University, USA	<i>Tutorial</i> Introduction to Statistical Network Analysis
	Higher-order Accurate Two-sample Network Inference and Network Hashing

Name and Affiliation	Talk Title
Harrison Zhou Yale University, USA	From Score Estimation to Sampling
Wen Zhou New York University, USA	Nonparametric Inference on Network Effects with Dependent Edges: Optimality, Two-sample, Multiple Strata
Ji Zhu University of Michigan, USA	Hyperbolic Network Latent Space Model with Learnable Curvature