

Modern Challenges in Data Decentralization: Federated Learning, Differential Privacy and Communication Constraints

Workshop One on Data robustness
(06–10 July 2026)



ORGANIZING COMMITTEE

Tony Cai
University of Pennsylvania

Yang Feng
New York University

Wanjie Wang
National University of Singapore

Yi Yu
University of Warwick



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/modernchallenges/>

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Monday, 06 July 2026

Time	Title	Speaker
1000–1030	Registration	
1030–1130	Differentially Private Estimation and Inference for Spatial Autoregressive Models	Huang Danyang <i>Renmin University of China, China</i>
1130–1400	<i>Lunch Break</i>	
1400–1500	Robust Multi-task Learning for Principal Component Analysis	Haolei Weng <i>Southern University of Science and Technology, China</i>
1500–1530	<i>Coffee Break</i>	
1530–1630	Trustworthy Learning across Heterogeneous Data: Differential Privacy and Adversarial Contamination	Mengchu Li <i>University of Birmingham, UK</i>

Tuesday, 07 July 2026

Time	Title	Speaker
0845–0900	Registration	
0900–1000		Ziteng Sun <i>Google Research, New York, USA</i>
1000–1030	<i>Coffee Break</i>	
1030–1130	Double Robustness vs. Double Flexibility in Unsupervised Domain Adaptation	Jiwei Zhao <i>University of Wisconsin, USA</i>
1130–1400	<i>Lunch Break</i>	
1400–1500	Order-Optimal 1-Bit Mean Estimation	Jonathan Mark Scarlett <i>National University of Singapore, Singapore</i>
1500–1530	<i>Coffee Break</i>	
1530–1630	Efficient Machine Unlearning with Minimax Optimality	Sai Li <i>Tsinghua University, China</i>
1800	Conference Dinner Location: TBA	

Wednesday, 08 July 2026		
Time	Title	Speaker
0845-0900	Registration	
0900-1000	Collaborative Learning Frameworks for Multi-Site Data Networks	Rui Duan <i>Harvard University, USA</i>
1000-1030	<i>Coffee Break</i>	
1030-1130	Transfer and Multi-Task Learning: Statistical Insights for Modern Data Challenges	Yang Feng <i>New York University, USA</i>
1130-1330	Lunch Break	
1600-1800	<u>Group Outing to Gardens By the Bay</u> 1-way transfer is provided departing from Park Avenue Rochester.	

Thursday, 09 July 2026		
Time	Title	Speaker
0845-0900	Registration	
0900-1000	Efficient Differentially Private Regression Inference for Longitudinal Data	Marco Avella Medina <i>Columbia University, USA</i>
1000-1030	<i>Coffee Break</i>	
1030-1130	Observation-Level Watermarking and Detection for Tabular Data	Bi Xuan <i>University of Minnesota, USA</i>
1130-1400	<i>Lunch Break</i>	
1400-1500	Trans-MA: Sufficiency-principled Transfer Learning via Model Averaging	Huihang Liu <i>Shanghai University of Finance and Economics, China</i>
1500-1530	<i>Coffee Break</i>	
1530-1630	Optimal Learning for Fairness-Aware Contextual Bandits	Gengyu Xue <i>University of Warwick, UK</i>

Friday, 10 July 2026		
Time	Title	Speaker
0845-0900	Registration	
0900-1000	Robust Bayesian Inference	Botond Szabo <i>Bocconi University, Italy</i>
1000-1030	<i>Coffee Break</i>	
Short Talk		
1030-1100		Sara Pinciroli <i>Bocconi University, Italy</i>

Friday, 10 July 2026		
Time	Title	Speaker
1100–1130		Banerjee Tathagata <i>National University of Singapore, Singapore</i>
1130–1400	<i>Lunch Break</i>	
1400–1500	ePTR: A Bridge to DP Estimation	Xin Tong <i>National University of Singapore, Singapore</i>
1500–1530	<i>Coffee Break</i>	
1530–1630	Sample-Efficient and Low-Cost Model-Free Reinforcement Learning	Lingzhou Xue <i>The Pennsylvania State University, USA</i>

This schedule is accurate as of 01 Jul 2026 and is subjected to changes.