Annual Summer School on Mathematical Aspects of Data Science (22 Jun 2026–01 Jul 2026)

List of Speakers and Talks' Title

Name and Affiliation	Talk Title
Arnab Bhattacharyya University of Warwick, UK	Weighted Sampling for Online Causal Discovery
Nicolò Cesa-Bianchi University of Milan, Italy	***Minicourse*** Foundations of Online Learning with Application to Digital Markets
Sinho Chewi Yale University, USA	Sampling
Kevin Jamieson University of Washington, USA	Is Adaptive Sampling for Learning Worth It? A Minimax View
Holden Lee John Hopkins University, USA	Diffusion Models
Jasper Lee University of California, Davis, USA	All-Purpose Mean Estimation over the Reals
Shuangping Li Yale University, USA	***Minicourse*** Statistical Physics of Random Computational Problems
Yuanyuan Lin Chinese University of Hong Kong, Hong Kong SAR	Beyond Standard Deep Learning: New Frontiers in Nonparametric Estimation, Domain Generalization, and Transformer Theory
Stanislav Minsker University of Southern California , USA	***Minicourse*** Moment and Deviation Inequalities for Random Matrices and their Applications
Ankur Moitra Massachusetts Institute of Technology, USA	***Minicourse*** Dynamical Systems, Graphical Models, and Language Models
Shay Moran Technion - Israel Institute of Technology, Israel	***Minicourse*** Mathematical Frameworks for Generalization in Learning Theory
Roberto Imbuzeiro Oliveira Instituto de Matemática Pura e Aplicada, Brazil	***Minicourse*** Optimal Mean Estimation and Robust Statistics
James Saunderson Monash University, Australia	Spectral Sparsification: from Graphs to Convex Cones

Name and Affiliation	Talk Title
Alexandre Tsybakov CREST-ENSAR Paris, France	***Minicourse*** Gradient-free Stochastic Optimization
Claire Vernade University of Technology Nuremberg, Germany	Foundations of Reinforcement Learning and Control
Van Vu The University of Hong Kong, Hong Kong SAR	New Matrix Perturbation Bounds via Relative Norm
Pengkun Yang Tsinghua University, China	Functional Estimation
Pierre Youssef New York University, Abu Dhabi, UAE	Random Matrices and Deep Neural Networks