Frontiers of Functional Data Analysis:
Challenges and Opportunities in the Era of AI
(19 Aug 2024–13 Sep 2024)

List of Speakers and Talk Titles

Name & Affiliation	Talk Title
Karthik Bharath *University of Nottingham, UK*	Rolling-Without-Slipping Models for Manifold-Valued Functional Data
Tony Cai *University of Pennsylvania, USA*	Transfer Learning for Functional Data Analysis
Jinyuan Chang *Southwestern University of Finance and Economics, China*	On the Modelling and Prediction of High-Dimensional Functional Time Series
Aurore Delaigle *The University of Melbourne, Australia*	Blockwise Dynamic Selection of Smoothing Parameters in Density Estimation for Streaming Data
Maria Grith *Erasmus University Rotterdam, Netherlands*	Group Factors in Single Stock Options
Giles Hooker *University of Pennsylvania, USA*	Functional Data Analysis as Nonparametric ODEs
Tailen Hsing *University of Michigan, USA*	*Mini Lecture* A Short Course on Functional Data Analysis Estimating the spectral density of a function-valued spatial process
Jian Huang *The Hong Kong Polytechnic University, Hong Kong SAR*	*Mini Lecture* Deep Generative Learning Leveraging Pretrained Large Models Conditional Stochastic Interpolation for Generative Learning
Hannah Lai *National University of Singapore, Singapore*	Neural Tangent Kernel in Implied Volatility Forecasting: A Nonlinear Functional Autoregression Approach
Jialiang Li *National University of Singapore, Singapore*	Robust Model Averaging Prediction of Longitudinal Response with Ultrahigh-dimensional Covariate
James Stephen Marron *University of North Carolina, USA*	*Distinguished Lecture Series in Statistics* Data Integration Via Analysis of Subspaces (DIVAS)
Hans-Georg Müller *University of California, Davis, USA*	Modeling Distribution-Valued Random Trajectories With Optimal Transports

Name & Affiliation	Talk Title
Byeong Uk Park *Seoul National University, S.Korea*	High-Dimensional Hilbert-Schmidt Linear Regression for Hilbert Manifold Variables
Xinghao Qiao *The University of Hong Kong, Hong Kong SAR*	Large-Scale Multiple Testing of Cross-Covariance Functions with Applications to Functional Network Models
Eftychia Solea *Queen Mary University of London, UK*	Robust Inverse Regression for Multivariate Elliptical Functional Data
Jane-Ling Wang *University of California, Davis, USA*	FDA in the age of AI
Wanjie Wang *National University of Singapore, Singapore*	Recovery of Time Labels for Noisy Dynamic Data
Fang Yao *Peking University, China*	FPCA with Diverging Dimensions: From Sparse to Dense Designs
Zhigang Yao *National University of Singapore, Singapore*	Manifold Learning: An Invitation to Data Science
Jin-Ting Zhang *National University of Singapore, Singapore*	Two-Sample Tests for Equal Distributions in Separable Metric Spaces: A Unified Semimetric-Based Approach