

Conference Schedule

All workshop sessions meet in the Dean's Meeting Center, 26th Floor, and College of Arts and Sciences Event Center, 2nd Floor, 25 Park Place, Atlanta, GA 30303.

Friday, May 05, 2023

2:00 pm -5:30 pm **Registration:** Room 1420 on the 14th Floor, 25 Park Place, Atlanta, GA 30303

Saturday, May 06, 2023

8:00-8:35 am **Registration and Refreshments:** Dean's Meeting Center, 26th Floor, 25 Park Place

8:35-8:45 am **Welcome and Opening Remarks:** Alexandra Smirnova
Chair, Department of Mathematics and Statistics
Georgia State University

8:45-9:45 am **Session 1 (Keynote Speech): Chair:** *Yichuan Zhao, Georgia State University*
Genomic Risk Prediction: Algorithms, Fairness, and Applications
Nilanjan Chatterjee, Johns Hopkins University

9:45-10:00 am **Break:** Refreshments

10:00-11:50 am

Session 2: Chair: Ruiyan Luo, Georgia State University

*Heterogeneous network analysis of disease clinical treatment
outcomes via mining electronic medical record data*

Shuangge Ma, Yale School of Public Health

*Image Analysis and Machine Learning for Multi-dimensional Tumor
Microenvironment Characterization*

Jun Kong, Georgia State University

*Counteracting selection bias and improving statistical
power in functional connectivity studies of autism*

Benjamin Risk, Emory University

11:50-1:30 pm

Box Lunch & Poster Set Up

1:30-3:15 pm

Session 3: Chair: Vladimir Bondarenko, Georgia State University

*Bayesian spatial binary regression for label fusion in
structural neuroimaging*

Andrew Brown, Clemson University

Causal inference with networked treatment diffusion

Weihua An, Emory University

*Towards optimal rerandomization: a reconciliation
between randomized and optimal designs*

Xinran Li, University of Illinois

3:15-3:25 pm **Break:** Refreshments

3:25-5:10 pm **Session 4:** **Chair:** *Yanqing Wang, Georgia State University*

*Multilayer exponential family factor models for
integrative analysis and learning disease progression*

Yuanjia Wang, Columbia University

Point processes with event timing uncertainty

Yao Xie, Georgia Institute of Technology

*Movement of asymptomatic cases shaped the first provincial
outbreak of SARS-CoV-2 in China*

Yang Yang, University of Georgia

5:10-5:20 pm **Break:** Refreshments

5:20-6:55 pm **Poster Session:** **Chair:** *Vladimir Bondarenko, Georgia State University*

College of Arts & Sciences Event Center, 2nd Floor, 25 Park Place

7:10-9:30 pm **Workshop Banquet:** **Hsu's Gourmet:**

192 Peachtree Center Ave NE, Atlanta, GA 30303

All workshop sessions meet in the Dean's Meeting Center, 26th Floor, 25 Park Place

Sunday, May 07, 2023

8:00-8:30 am **Registration and Refreshments:** Dean's Meeting Center, 26th Floor, 25 Park Place

8:30-10:15 am **Session 5: Chair:** *Sherry Wang, University of Texas at Arlington*

Applications of graph neural networks in single-cell data analyses

Dong Xu, University of Missouri, Columbia

Knowledge-guided machine learning with time-to-event outcomes and longitudinal predictors

Colin Wu, National Institutes of Health

Hierarchical classification for large scale learning

Adrian Barbu, Florida State University

10:15-10:30 am **Break:** Refreshments

10:30-12:05 pm **Session 6: Chair:** *Xinran Li, University of Illinois*

MetaNorm: incorporating meta-analytic priors into normalization of NanoString nCounter data

Sherry Wang, University of Texas at Arlington

Cox regression is robust to inaccurate EHR-extracted event time: an application to EHR-based GWAS

Cindy Chen, Vanderbilt University

*Bayesian framework for simultaneous registration and
estimation of noisy, sparse, and fragmented functional data*

Sebastian Kurtek, The Ohio State University

12:05-12:10 pm

Award Ceremony & Final Remarks: Yichuan Zhao

12:10-12:45 pm

Box Lunch