**June 4th Monday, Morning**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 9:00am - 10:30am | **High-dimensional Tensor Data Analysis**  
Room VEC 404/405  
Organizer & Chair: Xin Zhang, Florida State U  
1. Xuand Bi (Yale) ‘Multilayer Tensor Factorization with Applications to Recommender Systems’  
2. Will Wei Sun (U Miami) ‘Dynamic Tensor Clustering’  
3. Qing Mai (FSU) ‘Covariate-adjusted tensor classification in high-dimensions’  
**High-dimensional inference: assumption-lean or assumption-laden?**  
Room VEC 902/903  
Organizer: Ryan Tibshirani (CMU); Chair: Jelena Bradic (UCSD)  
1. Todd Kuffner (Washington U) ‘Inferential goals, targets, and principles in high-dimensional regression’  
2. Lucas Janson (Harvard) ‘Should We Model X in High-Dimensional Inference?’  
**Modern nonparametric statistic**  
Room VEC 1202/1203  
Organizer: Richard Samworth (Cambridge); Chair: Zhengling Qi (UNC)  
1. Samory Kpotufe (Princeton) ‘Regimes of label-noise determination benefits of Active Learning’  
2. Peter Orbanz (Columbia) ‘Sampling design and stochastic gradient descent for relational data’  
3. Tong Li (Columbia) ‘Statistical Properties of Maximum Mean Discrepancy with Gaussian Kernels’  
**New methods for directed acyclic Gaussian graph and adaptive data analysis**  
Room VEC 1302/1303  
Organizer: Yichao Wu (UIC); Chair: Weibin Mo (UNC)  
1. Lev Reyzin (UIC) ‘Sublinear-Time Adaptive Data Analysis’  
2. Xiaotong Shen (U Minnesota) ‘Reconstruction of a directed acyclic Gaussian graph’  
3. Yunzhang Zhu (OSU) ‘Convex clustering over an undirected graph’  
**Statistical Inference in Clustering Problems**  
Room VEC 1402  
Organizer & Chair: Jacob Bien (Cornell)  
1. Max G’Sell (CMU) ‘Inference for variable clustering under correlation-like similarities’  
2. Gourab Mukherjee (USC) ‘Large scale cluster analysis via L1 fusion penalization’  
3. Ying-Chi Chen (UW) ‘Density Tree and Density Ranking in Singular Measures’  
**Statistical methods of integrating -omics data**  
Room VEC 1403  
Organizer: Y. Wei (Columbia); Chair: X. Song (Mount Sinai)  
1. Gen Li (Columbia) ‘A Statistical Framework for Leveraging Information across Multiple Traits in Genetic Studies’  
2. Pei Wang (Mount Sinai) ‘A new method for miRNA–mRNA interactions due to environmental exposures’  
3. Peter Song (Umiich) ‘sSmFARM: Sparse Multivar. Factor Analysis Regression Model in integrative genomics analysis’  
| 11:00am - 12:30am | **Recent Advances in Statistical Learning**  
Room VEC 404  
Organizer: Ming Yuan (CMU); Chair: Dong Xia (UCSD)  
2. Aurelie Lozano (IBM) ‘M-estimation with the Trimmed L1 penalty’  
3. Sofia Olhede (UCL) ‘Methods of network comparison’  
**Supervised and unsupervised learning of complex data**  
Room VEC 405  
Organizer & Chair: Junhui Wang (Citi U of HK)  
1. Yongzhao Shao (NYU) ‘Systems of partially linear models with gradient boosting’  
2. Yoonkyung Lee (OSU) ‘Supervised Dimensionality Reduction for Exponential Family Data’  
3. Yuan Zhang (FSU) ‘Transform-based unsupervised point registration and unseeded low-rank graph matching’  
**Advances in estimation and prediction for understanding complex disorders**  
Room VEC 902  
Organizer: Heping Zhang (Yale); Chair: Naveen Narisetty(IIUC)  
1. Min-ge Xie (Rutgers) ‘Uncertainty Quantification of Treatment Regime in Precision Medicine’  
2. Yanyuan Ma (Penn State) ‘Semiparametric Estimation in the Secondary Analysis of Case-Control Studies’  
3. Ying Wei (Columbia) ‘Quantile Decision Trees and Forest’  
**Survival analysis with high-dimensional data**  
Room VEC 903  
Organizer: Ingrid Van Keilegom (KU Leuven); Chair: Ricardo Cao (Universidade da Coruña)  
1. Lan Wang (U Minnesota) ‘Robust optimal treatment regime estimation with survival outcome’  
2. Jelena Bradic (UCSD) ‘Fine-Gray Competing Risks Model with High-Dimensional Covariates: Estimation and Inference’  
3. Yue Zhao (KU Leuven) ‘Envelopes for censored quantile regression’  
**Recent advances of HD statistical learning**  
Hammer LL109 A/B  
Organizer & Chair: Xiaotong Shen (U of Minnesota)  
3. Peng Wang (U Cincinnati) ‘Uncertainty and Inference for High-Dimensional Models Using the Solution Paths’  

8:30am – 8:55am Welcome– VEC 401 multiple purpose room  
8:30am – 8:30am Registration & Continental Breakfast – VEC 401 multiple purpose room  
10:30 am – 11:00am Coffee Break at VEC Lobby
**June 4th Monday, Afternoon**

<table>
<thead>
<tr>
<th>12:30pm – 1:45pm Lunch Break</th>
<th>3:15pm – 3:45pm Coffee Break at VEC Lobby</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1:45pm - 3:15pm</strong></td>
<td><strong>3:45pm - 4:45pm</strong></td>
</tr>
</tbody>
</table>
| **Modern Multivariate Statistics: Tensors and Network**  
  (Room VEC 404)  
  Organizer & Chair: Jacob Bien (Cornell)  
  1. Dong Xia (Columbia) 'Computationally Efficient Tensor Completion with Statistical Optimality'  
  2. Peter Hoff (Duke) 'Structured shrinkage of tensor parameters'  
  3. Dave Choi (CMU) 'Global Spectral Clustering for Dynamic Networks'  
  **Lunch Break** | **Keynote Speech**  
  **VEC 201 Auditorium**  
  **Michael I. Jordan**  
  (University of California, Berkeley)  
  **On Gradient-Based Optimization:**  
  Accelerated, Stochastic and Nonconvex  
  Chaired by Annie Qu (UIUC) |
| **Flexible Statistical Learning and Inference**  
  (Room VEC 405)  
  Organizer: Yufeng Liu (UNC); Chair: Siliang Gong (UNC)  
  1. Min Jin Ha (MD Anderson) 'Multi-layered Graphical Models'  
  2. Fei Xue (UIUC) 'Variable Selection for Highly Correlated Predictors'  
  3. Xingye Qiao (SUNY Binghamton) 'Support Vector Machine with Confidence.'  
  **Philosophy of Science and the New Paradigm of Data-Driven Science**  
  (Room VEC 902/903)  
  Organizer & Chair: Todd Kuffner (Washington U)  
  1. Deborah Mayo (Virginia Tech) 'Your Data-Driven Claims Must Still be Probed Severely'  
  2. Ian McKeague (Columbia) 'On the replicability of scientific studies'  
  3. Xiao-Li Meng (Harvard) 'Conducting Highly Principled Data Science: A Statistician's Job and Joy'  
  **Advances in Bayesian methods for high-dimensional data**  
  (Room VEC 1202/1203)  
  Organizer: H. Bondell (U Melbourne); Chair: Xuan Bi (Yale)  
  1. Anindya Bhadra (Purdue) 'The Graphical Horseshoe Estimator for Inverse Covariance Matrices'  
  2. Anirban Bhattacharya (Texas A & M) 'Scalable MCMC for Bayes shrinkage priors'  
  3. Marianthi Markatou (SUNY Buffalo) 'Clustering on the Sphere: State-of-the-art and a Poisson Kernel-Based Model'  
  **High-dimensional machine learning methods**  
  (Room VEC 1302/1303)  
  Organizer & Chair: Annie Qu (UIUC)  
  1. Yuguo Chen (UIUC) 'Latent Space Approaches to Community Detection in Dynamic Networks'  
  2. Taps Maiti (MSU) 'Classification for High-Dimensional Functional Data'  
  3. Naveen Narisetty (UIUC) 'A unified approach for censored quantile regression'  
  **Recent development of Statistical Neuroimaging Analysis**  
  (Room VEC 1402/1403)  
  Organizer: Lexin Li (UC Berkeley); Chair: Jason Lee (USC)  
  1. Ali Shojaie (U of Washington) 'Analyzing Non-Stationary High-Dimensional Time Series...'  
  2. Eric Lock (U of Minnesota) 'Tensor-on-tensor regression'  
  3. Bei Jiang (University of Alberta) 'A Joint Modeling Approach for Baseline Matrix-valued Imaging Data and Treatment Outcome' |
### June 5th, Tuesday, Morning

#### 8:30am – 10:00am

<table>
<thead>
<tr>
<th>Event</th>
<th>Room/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonparameteric and Robust Statistical Methods for Imaging</td>
<td>Room VEC 405</td>
</tr>
<tr>
<td>Organizer: Hernando Ombao (KAUST); Chair: Wei Pan (UMN)</td>
<td></td>
</tr>
<tr>
<td>1. Mehdi Maadooliat (Marquette University) ‘Nonparametric Collective Spectral Density Estimation and Clustering with Application to Brain Activities’</td>
<td></td>
</tr>
<tr>
<td>2. Zhaoxia Yu (UC Irvine) ‘A Flexible Non-parametric Framework for Imaging Genetics’</td>
<td></td>
</tr>
<tr>
<td>3. Damla Senturk (UCLA) ‘Hybrid PCA of Region-Referenced Longitudinal Functional EEG Data’</td>
<td></td>
</tr>
<tr>
<td>Big Data of different forms and different challenges</td>
<td>Room VEC 1202 /1203</td>
</tr>
<tr>
<td>Organizer: Regina Liu (Rutgers); Chair: Heping Zhang (Yale)</td>
<td></td>
</tr>
<tr>
<td>1. Annie Qu (UIUC) ‘Individualized Multilayer Learning with An Application in Breast Cancer Imaging’</td>
<td></td>
</tr>
<tr>
<td>2. Catherine Chunling Liu (Polytech U of HK) ‘Efficient estimation and fast algorithms for genetic microarray data with survival outcomes’</td>
<td></td>
</tr>
<tr>
<td>3. Ricardo Cao (Universidade da Coruña) ‘Nonparametric mean estimation for big-but-biased data’</td>
<td></td>
</tr>
<tr>
<td>OODA: Manifold Data Integration</td>
<td>Room VEC 1302</td>
</tr>
<tr>
<td>Organizer: Marron, James Stephen (UNC); Chair: Anna Smith (Columbia)</td>
<td></td>
</tr>
<tr>
<td>1. Piercesare Secchi (Politecnico di Milano) ‘Random Domain Decomposition for Kriging Riemannian Data’</td>
<td></td>
</tr>
<tr>
<td>2. Ruiyi Zhang (Florida State) ‘Nonparametric K-Sample Test on Riemannian Manifolds with Applications to Analyzing Mitochondrial Shapes’</td>
<td></td>
</tr>
<tr>
<td>3. Chao Huang (UNC) ‘High-Dimensional Manifold Data Clustering on Symmetric Spaces’</td>
<td></td>
</tr>
<tr>
<td>Advances in high-dimensional statistics</td>
<td>Room VEC 1303</td>
</tr>
<tr>
<td>Organizer &amp; Chair: Genevera Allen (Rice)</td>
<td></td>
</tr>
<tr>
<td>1. Yufeng Liu (UNC) ‘Adaptive local estimation for high dimensional linear models’</td>
<td></td>
</tr>
<tr>
<td>2. Jacob Bien (Cornell) ‘Are Clusterings of Multiple Data Views Independent?’</td>
<td></td>
</tr>
<tr>
<td>Causal Inference and Machine Learning</td>
<td>Room VEC 1402</td>
</tr>
<tr>
<td>Organizer: Ryan Tibshirani (CMU); Chair: Vincent Joseph Dorie (Columbia)</td>
<td></td>
</tr>
<tr>
<td>1. Edward Kennedy (CMU) ‘Nonparametric causal effects based on incremental propensity score interventions’</td>
<td></td>
</tr>
<tr>
<td>2. Stefan Wager (Stanford) ‘Quasi-Oracle Estimation of Heterogeneous Causal Effects’</td>
<td></td>
</tr>
</tbody>
</table>

#### 10:00 – 10:30am Coffee Break at VEC Lobby

#### 10:30am - 11:30am

<table>
<thead>
<tr>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keynote Speech</td>
</tr>
<tr>
<td>VEC 401 multiple purpose room</td>
</tr>
<tr>
<td>David Madigan (Columbia University)</td>
</tr>
<tr>
<td>Honest learning for the healthcare system: large-scale evidence from real-world data</td>
</tr>
<tr>
<td>Chaired by</td>
</tr>
<tr>
<td>Tian Zheng (Columbia)</td>
</tr>
</tbody>
</table>

#### 11:30am – 1:00pm Lunch Break
### June 5th, Tuesday, Afternoon

#### 1:15pm - 2:45pm

<table>
<thead>
<tr>
<th>Session</th>
<th>Location</th>
<th>Organizer</th>
<th>Chair</th>
<th>Speakers</th>
</tr>
</thead>
</table>
| **Novel inference approaches for complex data setting**                | (ROOM VEC 1202/1203) | Regina Liu (Rutgers)       | Junhui Wang (City U. of Hong Kong) | 1. Ricardo Fraiman (Universidad de la República de Uruguay) 'Connecting pairwise spheres by depth: DCOPS'
|                                                                        |                |                           |                        | 2. Emre Barut (George Washington University) 'Stein Discrepancy Methods for Robust Estimation and Regression'
|                                                                        |                |                           |                        | 3. Aurore Delaigle (U of Melbourne) 'Estimating a covariance function from fragments of functional data' |
| **New development for analyzing biomedical complex data**              | (ROOM VEC 1302) | Zhezhen Jin (Columbia)     | Peng Wang (University of Cincinnati) | 1. Xiaonan Xue (Albert Einstein College of Medicine) 'New methods for estimating follow-up rates in cohort studies'
|                                                                        |                |                           |                        | 2. Mengling Liu (New York University) 'Mediation analysis with time-to-event mediator'
|                                                                        |                |                           |                        | 3. Tao Wang (Albert Einstein College of Medicine) 'Adjustment for covariates in genome-wide association study' |
| **New Statistical Machine Learning Tools**                             | (ROOM VEC 201) | Liu, Yufeng (UNC)         |                        | 1. Genevera Allen (Rice) 'Inference, Computation, and Visualization for Convex Clustering and Biclustering'
|                                                                        |                |                           |                        | 2. Guan Yu (SUNY Buffalo) 'High-dimensional Cost-constrained Regression via Non-convex Optimization'
|                                                                        |                |                           |                        | 3. Heping Zhang (Yale) 'Modeling Hybrid Traits for Comorbidity and Genetic Studies of Alcohol and Nicotine Co-Dependence' |
| **Functional Data Analysis in Action**                                 | (ROOM VEC 1402) | Kehui Chen (U of Pitt)    |                        | 1. Jane-Ling Wang (UC Davis) 'Brain Functional Connectivity -- The FDA Approach'
|                                                                        |                |                           |                        | 2. Daniel Gervini (U of Wisconsin at Milwaukee) 'Functional Data Methods for Replicated Point Processes'
|                                                                        |                |                           |                        | 3. Hans Mueller (UC Davis) 'Frechet Regression for Time-Varying Covariance Matrices: Assessing Regional Co-Evolution in the Developing Brain' |
| **Statistical Learning and Genomics**                                  | (ROOM VEC 1403) | Ji Zhu (Umich)            | Bing Li (Penn State)   | 1. Umut Ozbek (Mount Sinai) 'Proteomics and Genomics Integration for Translational Cancer Research'
|                                                                        |                |                           |                        | 2. Xiaoyu Song (MSSM) 'What can we gain from proteogenomics prediction? The downstream analysis of NCI-CPTAC Proteogenomics DREAM Challenge'
|                                                                        |                |                           |                        | 3. Wei Pan (U of Minnesota) 'An empirical comparison of deep neural networks and other supervised learning methods' |

#### 2:45pm - 3:15pm

**Coffee Break at VEC Lobby**

#### 3:15pm - 4:45pm

<table>
<thead>
<tr>
<th>Session</th>
<th>Location</th>
<th>Organizer</th>
<th>Chair</th>
<th>Speakers</th>
</tr>
</thead>
</table>
| **Recent advances in high-dimensional data**                           | (ROOM VEC 1202) | Cunhui Zhang (Rutgers)     | Sijian Wang (Rutgers)  | 1. Pierre Bellec (Rutgers) 'The noise barrier and the large signal bias of the Lasso and other convex estimators'
|                                                                        |                |                           |                        | 2. Yuan Liao (Rutgers) 'Factor-Driven Two-Regime Regression'
|                                                                        |                |                           |                        | 3. Jiashun Jin (CMU) 'Network Analysis by SCORE'                           |
| **Interpretable modeling and understanding variables**                 | (ROOM VEC 1203) | Jeff Simonoff (NYU)       |                        | 1. Aaron Fisher (Harvard) 'Model Class Reliance: Variable Importance when all Models are Wrong, but "Many" are Useful' |
|                                                                        |                |                           |                        | 2. Tong Wang (U Iowa) 'Feature-Efficient Multi-value Rule Sets for Interpretable Classification'
|                                                                        |                |                           |                        | 3. Cynthia Rudin (Duke) 'Recent Work on Interpretable Machine Learning Models' |
| **Statistical Inference for High-Dimensional Data**                    | (ROOM VEC 1302) | Zhu, Hongtu(MD Anderson)  | Xuan Bi(Yale)          | 1. Xi Chen (NYU) 'Quantile Regression for big data with small memory'
|                                                                        |                |                           |                        | 2. Joshua Loftus (NYU) 'Inference after cross-validation'
|                                                                        |                |                           |                        | 3. Yihong Wu (Yale) 'Optimal estimation of Gaussian mixtures via denoised method of moments' |
| **New Development on Neuroimage Data Analysis**                       | (ROOM VEC 1403) | Lingzhou Xue (Penn State) |                        | 1. Tingting Zhang (UVA) 'A Low-Rank Multivariate General Linear Model for Multi-Subject MRI Data and a Non-Convex Optimization Algorithm for Brain Response'
|                                                                        |                |                           |                        | 2. Zhengwu Zhang (Rochester) 'Nonparametric Bayes Models of Fiber Curves Connecting Brain Regions'
|                                                                        |                |                           |                        | 3. Dehan Kong (U Toronto) 'Supervised Principal Component Regression for Functional Data with High Dimensional Predictors' |
| **Spectral Clustering, Graphical Models, and Hierarchical Interactions** | (ROOM VEC 1402) | Hongyu Zhao (Yale)        |                        | 1. Hongyu Zhao (Yale) 'Spectral clustering based on learning similarity matrix'
|                                                                        |                |                           |                        | 2. Bing Li (Penn State) 'Copula Gaussian Graphical Models for Functional Data'
|                                                                        |                |                           |                        | 3. Lingzhou Xue (Penn State) 'Learning Nonconvex Hierarchical Interactions' |
| **Data Science in IT Industries**                                      | (ROOM VEC 1403) | David Banks(Duke)         | Genevera Allen(Rice)  | 1. Julie Novak (Netflix) 'Using Data Science to Improve Streaming Quality at Netflix'
|                                                                        |                |                           |                        | 2. Tim Au (Google) 'Random Forests, Decision Trees, and Categorical Predictors: The "Absent Levels" Problem'
|                                                                        |                |                           |                        | 3. David Banks (Duke University and SAMSI) 'The Challenge of Educating Data Scientists for Industry' |
### June 6\(^{th}\), Wednesday, Morning

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30am – 8:00am</td>
<td><strong>Registration and Continental Breakfast at VEC Lobby</strong></td>
</tr>
</tbody>
</table>
| 8:30am – 10:00am | **Machine Learning and Precision Medicine**  
(Room VEC 404/405)  
Organizer & Chair: **Haoda Fu** (Eli Lilly)  
1. **Donglin Zeng** (UNC) ’Support vector machines for learning optimal individualized treatment rules with multiple treatments’  
2. **Haoda Fu** (Eli Lilly) ’Individualized Treatment Recommendation (ITR) for Survival Outcomes’  
3. **Yuanjia Wang** (Columbia) ’Estimation and Evaluation of Linear Individualized Treatment Rules to Guarantee Performance’  

**Advances in Nonparametric Statistics and their Applications**  
(Room VEC 902/903)  
Organizer: **Narisetty, Naveen** (UIUC); Chair: **Fei Xue** (UIUC)  
1. **Roger Koenker** (UIUC and UCL) ’Fly-By-Night Life Insurance and the NPMLE for Weibull Frailty Models’  
2. **Christopher Kinson** (UIUC) ’Learning from Dr. Martin Luther King Jr: Text analysis and statistical approaches for civil rights’  
3. **Stanislav Volgushev** (U Toronto) ’Inference on the dependence structure of time series extremes’  

**Recent advances in spectral methods for complex data**  
(Room VEC 1202/1203)  
Organizer: **Yuekai Sun** (UMich); Chair: **Edgar Dobriban** (Upenn)  
1. **Geoff Schiebinger** (MIT) ’Analyzing Developmental Processes with Optimal Transport’  
2. **Edgar Dobriban** (Wharton) ’How to select the number of components in PCA and factor analysis? Understanding and improving permutation methods’  
3. **Austin Benson** (Cornell) ’Higher-order spectral graph clustering with motifs’  

**New machine learning methods**  
(Room VEC 1302)  
Organizer & Chair: **Annie Qu** (UIUC)  
1. **Quoc Tran-Dinh** (UNC) ’Generalized self-concordant optimization and its applications in statistical learning’  
2. **Yixin Fang** (New Jersey Institute of Technology) ’On Scalable Inference with Stochastic Gradient Descent’  
3. **Junhui Wang** (City U. of Hong Kong) ’Scalable Kernel-based Variable Selection with Sparsistency’  

**New directions in functional data analysis**  
(Room VEC 1402)  
Organizer: **Tailen Hsing** (UMich); Chair: **Vincent Joseph Dorie** (Columbia)  
1. **Kehui Chen** (U of Pitt) ’Nonparametric covariance estimation for mixed longitudinal studies’  
2. **Matthew Reimherr** (Penn State) ’Functional Data Analysis with Highly Irregular Designs with Applications to Head Circumference Growth’  
3. **Hao Ni** (UCL) ’Supervised Learning on the Path Space and its Applications’  

<table>
<thead>
<tr>
<th>10:00 – 10:30am</th>
<th>Coffee Break at VEC Lobby</th>
</tr>
</thead>
</table>
| 10:30am – 11:00am | **Keynote Speech**  
VEC 401 multiple purpose room  
**Liza Levina**  
(University of Michigan)  
Matrix completion in network analysis  
Chaired by **Ying Wei** (Columbia)  

| 11:30am – 1:00pm | Lunch Break                                                                                   |
### 1:15pm - 2:45pm

#### Modern Approaches for Inference and Estimation
**ROOM VEC 404/405**
Organizer & Chair: Genevra Allen (Rice)
1. **Yang Ning** (Cornell) ‘High-Dimensional Propensity Score Estimation via Covariate Balancing’
2. **Gautam Dasarthy** (Rice University) ‘Interactive algorithms for graphical model selection’
3. **Will Fithian** (UCB) ‘AdaPT: An interactive procedure for multiple testing with side information’

#### Functional and high dimensional data
**ROOM VEC 1403**
Organizer & Chair: Aurore Delaigle (U of Melbourne)
1. **Emad Abdurasul** (James Madison University) ‘Small Sample Confidence Intervals for the ACL (Abduskhurov, Cheng, and Lin) Estimators Under the Proportional Hazards Model’
2. **Sophie Dabo-Niang** (Université Lille 3) ‘Binary functional linear models in a stratified sampling setting’
3. **Patrice Bertail** (Université Paris Nanterre) ‘Functional CLT and sharp bounds for some (conditional Poisson) survey sampling plans with applications to big (tall) data’

#### Machine learning, classification and designs
**ROOM VEC 1202 /1203**
Organizer & Chair: Annie Qu (UIUC)
1. **Ying Hung** (Rutgers) ‘Efficient Gaussian Process Modeling using Experimental Design-based Subagging’
2. **Irina Gaynanova** (Texas A&M) ‘Structural Learning and Integrative Decomposition of Multi-View Data’
3. **Adam Rothman** (U. of Minnesota) ‘Shrinking characteristics of precision matrix estimators’

#### Statistics in neuroscience and microbiome research at the Flatiron Institute
**ROOM VEC 1303**
Organizer & Chair: Christian L. Müller (Flatiron Institute, Simons Foundation)
1. **Cengiz Pehlevan** (Simons Foundation) ‘Neural representation learning as kernel alignment’
2. **Aditya Mishra** (Flatiron Institute) ‘Robust regression with compositional covariates’
3. **Eftychios Pnevmatikakis** (Simons Foundation) ‘Online deconvolution and demixing of calcium imaging data in real-time’

#### Recent Advances in Statistical Network, Functional and High-dimensional Data Analysis
**ROOM VEC 1402**
Organizer: Ji Zhu (Umich); Chair: Yujia Deng (UIUC)
1. **George Michailidis** (U of Florida) ‘Factor Augmented Vector Autoregressive Models under High’
2. **Edoardo Airoldi** (Harvard) ‘Model-assisted design of experiments on networks and social media platforms’
3. **Gareth James** (USC) ‘Correcting Selection Bias via Functional Empirical Bayes’

### 3:15pm - 4:45pm

#### New insights into classical statistical methods
**ROOM VEC 404/405**
Organizer & Chair: Qing Mai (Florida State U)
1. **Yiyuan She** (Florida State U) ‘Rank-constrained inherent clustering paradigm for supervised and unsupervised learning’
2. **Yun Yang** (Florida State U) ‘Fast and Optimal Bayesian Inference via Variational Approximations’
3. **Xin Zhang** (Florida State U) ‘An Iterative Penalized Least Squares Approach to Sparse Canonical Correlation Analysis’

#### New developments for large complex data
**ROOM VEC 902**
Organizer & Chair: Annie Qu (UIUC)
1. **Jiwei Zhao** (SUNY, Buffalo) ‘Point and Interval Estimations for Individualized MCID’
2. **Doug Simpson** (UIUC) ‘Robust Probabilistic Classification for Irregularly Sampled Functional Data’
3. **Francesca Petralia** (Mount Sinai) ‘A new method for constructing gene co-expression networks based on samples with tumor purity heterogeneity’

#### Statistical inference and complex data structures
**ROOM VEC 1303**
Organizer: Eric Laber (NCSU); Chair: Yubai Yuan (UIUC)
1. **Kristin Linn** (UPenn) ‘Inter-modal Coupling: A Class of Measurements for Studying Local Covariance Patterns Among Multiple Imaging Modalities’
2. **Jeff Goldsmith** (Columbia University) ‘Modeling Heterogeneity in Motor Learning using Heteroskedastic Functional Principal Components’

#### Causal inference and statistical learning
**ROOM VEC 1402**
Organizer & Chair: Cynthia Rudin (Duke)
1. **Chris Wiggins** (Columbia & NY Times) ‘Teaching History and Ethics of Data, with Python’
2. **Ben Letham** (Facebook data science) ‘Bayesian optimization and A/B tests’
3. **Alex Volfovsky** (Duke) ‘Causal inference from complex observational data’

---

End of the Conference