

CONFERENCE ON BIG DATA
CENTER OF MATHEMATICAL SCIENCES AND APPLICATIONS, HARVARD UNIVERSITY
SCIENCE CENTER HALL C, 1 OXFORD STREET, CAMBRIDGE, MA
AUGUST 24-26, 2015

Monday August 24

<i>Time</i>	<i>Speaker</i>	<i>Title</i>
8:45am	Meet and Greet	
9:00am	Sendhil Mullainathan	Prediction Problems in Social Science: Applications of Machine Learning to Policy and Behavioral Economics
9:45am	Mike Luca	Designing Disclosure for the Digital Age*+3.
10:30	Break	
10:45	Jianqing Fan	Big Data Big Assumption: Spurious discoveries and endogeneity
11:30am	Daniel Goroff	Privacy and Reproducibility in Data Science
12:15pm	Break for lunch	
2:00pm	Ryan Adams	Exact Markov Chain Monte Carlo with Large Data
2:45pm	David Dunson	Scalable Bayes: Simple algorithms with guarantees
3:30pm	Break	
3:45pm	Mike Jordan	Computational thinking, inferential thinking and Big Data
4:30pm	Joel Tropp	Applied Random Matrix Theory
5:15pm	David Woodruff	Input Sparsity and Hardness for Robust Subspace Approximation

Tuesday, August 25

<i>Time</i>	<i>Speaker</i>	<i>Title</i>
8:45am	Meet and Greet	
9:00am	Gunnar Carlsson	Persistent homology for qualitative analysis and feature generation
9:45am	Andrea Montanari	Semidefinite Programming Relaxations for Graph and Matrix Estimation: Algorithms and Phase Transitions
10:30am	Break	
10:45am	Susan Athey	Machine Learning and Causal Inference for Policy Evaluation
11:30am	Denis Nekipelov	Robust Empirical Evaluation of Large Competitive Markets
12:15pm	Break for lunch	

2:00pm	Lucy Colwell	Using evolutionary sequence variation to make inferences about protein structure and function: Modeling with Random Matrix Theory
2:45pm	Simona Cocco	Inverse Statistical Physics approaches for the modeling of protein families
3:30pm	Break	
3:45pm	Remi Monasson	Inference of top components of correlation matrices with prior informations
4:30pm	Sayan Mukherjee	Random walks on simplicial complexes and higher order notions of spectral clustering

A banquet from 7:00-8:30pm will follow Tuesday's talks. This event is by invitation only.

Wednesday, August 26

<i>Time</i>	<i>Speaker</i>	<i>Title</i>
8:45am	Meet and Greet	
9:00am	Ankur Moitra	Beyond Matrix Completion
9:45am	Florent Krzakala	Optimal compressed sensing with spatial coupling and message passing
10:30am	Break	
10:45am	Piotr Indyk	Fast Algorithms for Structured Sparsity
11:30am	Guido Imbens	Exact p-values for network inference
12:15pm	Break for lunch	
2:00pm	Edo Airoldi	Some fundamental ideas for causal inference on large networks
2:45pm	Ronitt Rubinfeld	Something for almost nothing: sublinear time approximation algorithms
3:30pm	Break	
3:45pm	Lenka Zdeborova	Clustering of sparse networks: Phase transitions and optimal algorithms
4:30pm	Jelani Nelson	Dimensionality reductions via sparse matrices

