

## International Workshop on the Perspectives on High-dimensional Data Analysis III

Earth Sciences Building, Rm 2012- 2207 Main Mall, V6T 1Z4

### Thursday May 23<sup>rd</sup>, 2013

8:30am - 9:00am	Registration and Light refreshments
9:00am- 9:20am	<b>Welcome Address: S. Ejaz Ahmed</b> , Chair Organizing Committee, Brock University & Alejandro Adem, PIMS Director
9:20am-10:20am	<b>Keynote Address: Jianqing Fan:</b> <i>Strong Oracle Optimality of Folded Concave Penalized Estimation</i>
10:20am-10:50am	Coffee Break
10:50am-11:15am	<b>Xiaoli Gao:</b> <i>The KLAN for Complex Grouped Variable Selection</i>
11:15am-11:40am	<b>Abbas Khalili:</b> <i>Regularization in Mixture-of-Experts Models with Diverging Number of Parameters</i>
11:40am-12:05pm	<b>Samuel Kou:</b> <i>Optimal Shrinkage Estimation in Heteroscedastic Hierarchical Models</i>
12:05pm-12:30pm	<b>Kjell Doksum:</b> <i>Principal Component Analysis (PCA) for High Dimensional Data. PCA is dead. Long live PCA.</i>
12:30pm – 1:30pm	Lunch
1:30pm – 1:55pm	<b>Bing Li:</b> <i>A general theory of nonlinear sufficient dimension reduction: formulation and estimation</i>
1:55pm-2:20pm	<b>David Stephens:</b> <i>Causal adjustment procedures for high-dimensional confounders</i>
2:20pm-2:45pm	<b>Yang Feng:</b> <i>Consistent Cross-Validation for Tuning Parameter Selection in High-Dimensional Variable Selection</i>
2:45pm-3:10pm	<b>Anand Vidyashankar:</b> <i>High Dimensional Branching Processes and Related Regression Models</i>
3:10pm – 3:40pm	Coffee Break
3:40pm–4:05pm	<b>Sijian Wang:</b> <i>Meta-analysis based variable selection for gene expression data</i>
4:05pm-4:30pm	<b>Richard Charnigo:</b> <i>Risk Score Modeling of Multiple Gene to Gene Interactions using Aggregated-Multifactor Dimensionality Reduction</i>
4:30pm-4:55pm	<b>Guoqing Diao:</b> <i>Bootstrap Inference for High-dimensional Data</i>
6:00pm - 8:30pm	<b>Reception and Poster Presentation</b>

### Friday May 24<sup>th</sup>, 2013

8:30am - 9:00am	Arrival
9:00am-9:25am	<b>Farouk Nathoo:</b> <i>Variational Bayes Spatial Analysis of Combined MEG, EEG, and fMRI Data</i>
9:25am-9:50am	<b>Tingting Zhang:</b> <i>A Semi-parametric Model for Multi-Subject fMRI Data: Evaluating the Effect of Social Relationship on Brain Activity</i>
9:50am-10:15am	<b>Bin Nan:</b> <i>Functional Regression for Brain Imaging</i>
10:15am-10:40 am	<b>Efstathia Bura:</b> <i>Sufficient reductions in regressions with elliptically contoured inverse predictors</i>
10:40am-11:10am	Coffee Break
11:10am-11:35am	<b>Annie Qu:</b> <i>Time-varying networks estimation and dynamic model selection</i>
11:35am-12:00pm	<b>Ali Shojaie:</b> <i>Graph Estimation with Joint Additive Models</i>
12:00pm-12:25pm	<b>Alexandre Leblanc:</b> <i>The Projection Median and its Connection to Multivariate Ranks, Medians and Depth-Weighted Averages</i>
12:30pm-1:30pm	Lunch

1:30pm-1:55pm	<b>Jie Chen:</b> <i>A Bayesian approach for the identification of DNA copy number variations using the next generation sequencing data</i>
1:55pm-2:20pm	<b>Sudipto Banerjee:</b> <i>Hierarchical Models for High-Dimensional Spatial Data</i>
2:20pm-2:45pm	<b>Veronica Berrocal:</b> <i>Space-time downscaling of numerical model outputs for prediction of spatial extremes: an application to ozone extremes</i>
2:45pm-3:10pm	<b>Joseph S. Verducci:</b> <i>Restricted Support Families for Discovering Concentration of Association in a Subpopulation</i>
3:10pm-3:40pm	Coffee Break
3:40pm-4:05pm	<b>Mike Daniels:</b> <i>Connections between banding the Partial Autocorrelation Matrix and the inverse Choleski factor</i>
4:05pm-4:30pm	<b>Yiyuan She:</b> <i>On the Cross-Validation for Sparse Reduced Rank Models</i>
4:30pm-4:55pm	<b>Jianfeng Yao:</b> <i>On some inference problems in high-dimensional factor models</i>

### Saturday

8:30am - 9:00am	Light Refreshments
9:00am -9:25am	<b>Jian Qing Shi:</b> <i>Nonlinear Curve Fitting and Clustering Using GPR Models</i>
9:25am -9:50am	<b>Catherine Liu:</b> <i>Variable Selection for Linear Models with Mixed Error</i>
9:50am -10:15am	<b>Jacob Bien:</b> <i>A Lasso for Hierarchical Interactions</i>
10:15am -10:40am	<b>Liqun Wang:</b> <i>Adaptive Estimation of Error Covariance Matrices in Ensemble Kalman Filter for Data Assimilation</i>
10:40am -11:10am	Coffee Break
11:10am -11:35am	<b>Hyunkeun (Ryan) Cho:</b> <i>Model selection for correlated data with diverging number of parameters</i>
11:35am-12:00pm	<b>Yan Zhou:</b> <i>Sparse Multivariate Factor Analysis Regression Models and Its Application to Integrative Genomics Analysis</i>
12:00pm-12:25pm	<b>Yiping Yuan:</b> <i>Constrained likelihood and reconstruction of a directed acyclic Gaussian graph</i>
12:25pm-12:45pm	<b>Panel Discussion:</b> S. Ejaz Ahmed (Brock), Timothy D. Johnson (UofM) and Jiahua Chen (UBC),
12:45pm-12:55pm	Poster awards Presentation
12:45pm-12:55 pm	Closing remarks
12:55pm-2:00pm	Lunch