PIMS / AMI Seminar

Friday, March 28, 2014
3:00 p.m.
CAB 657

"Stability of Elastic Net Estimator for Random Matrices"

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Abstract

Methods based on L1-relaxation are popular for sparse regression in high dimensions. Elastic Net Regularization is an algorithm for learning and variable selection. It is based on a regularized least square procedure with a penalty which is the sum of an L1 penalty (like Lasso) and an L2 penalty (like ridge regression). The first term enforces the sparsity of the solution, whereas the second term ensures democracy among groups of correlated variables. In this talk, we show that the Elastic Net estimator is stable when the design matrix satisfies some desirable properties. Here the matrices include the independent random matrices and high correlated Gaussian design matrices.

Refreshments will be served in CAB 649 at 2:30 p.m.