



**The Hong Kong Polytechnic University
Department of Applied Mathematics**

**Seminar
On**

**Block-coordinatewise methods for sparse
optimization with nonsmooth regularization**

by

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Abstract

In the last 10 years there has been active interest in finding sparse solutions to optimization problems. A popular approach is to use nonsmooth regularization (e.g., l_1 -regularization) to induce solution sparsity, as exemplified by Basis Pursuit and lasso in statistical estimation. The regularized problem is large scale, sometimes dense, and nonsmooth. We discuss how block-coordinatewise descent methods can be applied to efficiently solve the regularized problem. Applications include variable selection in linear/logistic regression, sparse inverse covariance estimation. (This is joint work with Sylvain Sardy and Sangwoon Yun.)

Date : 20 February, 2008 (Wednesday)
Time : 3:00 – 4:30 p.m.
**Venue : Departmental Conference Room HJ610
The Hong Kong Polytechnic University**

***** ALL ARE WELCOME *****