



**The Hong Kong University of Science and Technology**

**Department of Mathematics**

**Seminar on Applied Mathematics**

**Sparse recovery by  $L^0$  penalty**

**By**

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**Abstract**

Sparsity is one of the powerful tools for signal recovery and imaging, and has achieved great success in many practical applications. Conventionally this is realized numerically by imposing an  $l^1$  penalty, which is the convex relaxation of the  $l^0$  penalty. In this talk, I will describe the idea and discuss our recent efforts in the efficient numerical solution of the  $l^0$  problem. I will present a primal dual active set algorithm, and present some numerical results to illustrate the method.

***Date : Friday, 5 May 2017***

***Time: 4:00 p.m. – 5:00 p.m***

***Venue: Room 4472, Academic Building  
(near Lifts 25&26), HKUST***

***All are welcome!***