



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

**Department of Mathematics**

**Seminar on Applied Mathematics**

*Sensing with Redundant Frames*

*by*

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**Abstract**

Given a signal sparse in a redundant frame, how to recover it with substantially undersampled linear measurements? The redundant frame component adds complexity to the problem. We will survey current results, list some fundamental problems that need to be solve, and present new results on both deterministic and random measurements. We show that subgaussian measurements achieve the minimum number of measurements and these results complement the compressed sensing literature.

**Date: Friday, 14 June 2019**

**Time: 3:30p.m. – 4:30p.m.**

**Venue: Room 4504, Academic Building,  
(Lifts 25-26), HKUST**

*All are welcome!*