



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

**Department of Mathematics**

**Seminar on Data Science, Applied Mathematics  
and Computational Science**

**Distributed consensus optimization algorithms**

*by*

***Prof. Ming Yan***

***Department of Computational Mathematics,  
Science and Engineering and Department of Mathematics,  
Michigan State University***

**Abstract**

Distributed consensus optimization over networks has many applications in the wireless sensor networks, resource allocations, and internet of things. In this talk, I will introduce several consensus optimization algorithms: how to derive them; how to choose parameters; and their convergence results. Specifically, I will show the optimal range of the parameters for EXTRA; and I will introduce NIDS--the first algorithm that can have a large and network-independent stepsize.

**Date: Friday, 4 May 2018**

**Time: 3:00p.m. – 4:00p.m.**

**Venue: Room 5506 (lift 25, 26),  
Academic Building, HKUST**

***All are welcome!***