

# The Hong Kong University of Science and Technology

### **Department of Mathematics**

## Seminar on Statistics

### **Big Data in Precision Medicine and Population Health: Challenges and Opportunities**

By

## **Prof. Qi LONG** University of Pennsylvania

#### <u>Abstract</u>

Advances in technologies have enabled generation of big data in biomedical and clinical research including, but not limited to, –omics data, electronic health records (EHRs) data, mobile health (mHealth) data, and imaging data. Such big, complex biomedical data offer promising opportunities in advancing precision medicine and population health. However, significant challenges are often present in management and analysis of such data. In this talk, I will share my experience in management and analysis of big, complex biomedical data. In particular, I will use completed and ongoing research projects to illustrate analytical approaches developed by my research group for analysis of –omics data, EHRs data, and mHealth data in advancing precision medicine and population health.

Date: Monday, 5 March, 2018

*Time:* 11:00a.m.-12:00n.n.

Venue: Room 1504, Academic Building, (near Lifts 25&26), HKUST

All are welcome!