

## The Chinese University of Hong Kong Department of Statistics

## Seminar

## Assisted Analysis of Gene Expression Data

By

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## Abstract

Gene expression studies have been playing a pivotal role for the research on many complex diseases. With the high dimensionality and noisy nature of data, the analysis of gene expression studies, despite many promising findings, is still often unsatisfactory. In recent omics studies, a prominent trend is to conduct multidimensional studies, where gene expressions are profiled along with their regulators (methylation, copy number variation, microRNA, and others). In a series of studies, we have developed assisted analysis techniques, which use regulator information to assist the regression, clustering, and other analysis of gene expression data. The assisted analysis differs from the analysis of gene expression data only and integrated analysis in multiple aspects. Numerical and statistical investigations show promising performance of the assisted analysis.

Date: May 2, 2018 (Wednesday) Time: 2:30 p.m. - 3:30 p.m.

Venue: Lady Shaw Building, Room LT2

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ALL INTERESTED ARE WELCOME