

### DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE THE UNIVERSITY OF HONG KONG

# 50th Anniversary Seminar Series

# **Professor Dennis K.J. LIN**

University Distinguished Professor Department of Statistics Pennsylvania State University USA

will give a talk entitled

## **GHOST DATA**

#### Abstract

As natural as the real data, ghost data is everywhere—it is just data that you cannot see. We need to learn how to handle it, how to model with it, and how to put it to work. Some examples of ghost data are:

- (a) Virtual data—it isn't there until you look at it;
- (b) Missing data—there is a slot to hold a value, but the slot is empty;
- (c) Pretend data—data that is made up; and
- (d) Simulation data—data to answer "what if."

Absence of evidence/data is not evidence of absence. In fact, it can be evidence of something. This is a rather early stage of my research in this area--any feedback from you will be deeply appreciated. Three movies will be discussed in this talk: (1) "The Sixth Sense" (Bruce Wallis)—I can see things that you cannot see; (2) "Sherlock Holmes" (Robert Downey)—absence of expected facts; and (3) "Edge of Tomorrow" (Tom Cruise)—how to speed up your learning (AlphaGo-Zero will also be discussed). Much of the basic idea is highly influenced via Mr. John Sall (JMP-SAS).

It will be helpful, if you watch these movies before coming to my talk!

on

## Monday, December 4, 2017

(Refreshments will be served from 10:45 a.m. outside Room 301 Run Run Shaw Building)

11:00 a.m. - 12:00 noon

at

Room 301, Run Run Shaw Building

<u>Visitors Please Note</u> that the University has limited parking space. If you are driving please call the Department at 3917 2466 for parking arrangement.