

For favour of posting



DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

50th Anniversary Seminar Series

Professor Sheldon Mark ROSS

Daniel J. Epstein Chair Professor
Epstein Department of Industrial & Systems Engineering
University of Southern California, US

will give a talk
entitled

**THE FRIENDSHIP PARADOX AND A FRIENDSHIP
NETWORK MODEL**

Abstract

Loosely speaking, the friendship paradox says that “your friends tend to have more friends than you do”. We explain precisely what has been shown and give some variations. For one thing, we show that a randomly chosen friend of a randomly chosen person has a stochastically larger number of friends than does the randomly chosen person. We then construct a probabilistic model for a friendship network by assuming that each person in a community has a value attached to them, with the values of the different members of the population being independent with a common distribution. We then suppose that, independently of all else, a person of value x and one of value y will be friends with probability $p(x, y)$, for some suitably defined function p . We consider such questions as to whether it is necessarily true that information that persons i and j are friends and that persons i and k are friends makes it more likely that j and k are friends. We show that the more friends a person has among a given set then the stochastically more friends that person will tend to have among any specified set of people.

on

Friday, May 26, 2017

(Refreshments will be served from 10:15 a.m. outside Room 301 Run Run Shaw Building)

10:30 a.m. – 11:30 am

at

Room 301, Run Run Shaw Building

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

ALL INTERESTED ARE WELCOME