



Department of Statistics & Actuarial Science  
The University of Hong Kong 統計及精算學系



## 50th Anniversary Public Lecture

# The Poisson Paradigm



by **Professor Sheldon Mark ROSS**

*Daniel J. Epstein Chair Professor*

*Epstein Department of Industrial & Systems Engineering*

*University of Southern California, US*

**May 25, 2017 (Thursday)**

6:00 p.m. - 7:00 p.m.

Rayson Huang Theatre (黃麗松講堂), HKU

Tea Reception 5:30 p.m. to 6:00 p.m.

### **About the talk**

The Poisson Paradigm is one of the most useful results of probability. It relates to situations where there are multiple trials, with each trial being either a success or a failure. The paradigm says that if each trial has a small probability of being a success and if the trials are either independent or "weakly dependent" then the total number of successes approximately has a Poisson distribution. We illustrate the use of this paradigm as it applies to

- (a) the Match Problem,
- (b) the Birthday Problem,
- (c) Reliability shock models,
- (d) Patterns,
- (e) a Friendship Network.

### **About the speaker**

Since 2004 Sheldon Ross has been the Epstein Chair Professor in the Epstein Department of Industrial and Systems Engineering at the University of Southern California. Before then he was, for many years, a member of the Department of Industrial Engineering and Operations Research at the University of California, Berkeley. He earned a Ph.D in Statistics from Stanford University. He works in the areas of applied probability and over the years has written many papers and books on the subject.

For online registration, please go to <http://www.saasweb.hku.hk/seminar/20170525.html>



For the Department 50th anniversary homepage, please visit <http://www.saasweb.hku.hk/50th>

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