DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

(jointly organized by the Department of Systems Engineering and Engineering Management
at City University of Hong Kong)

Seminar

Professor Mark BROWN

Department of Statistics
Columbia University
USA

will give a talk

entitled

APPROXIMATIONS WITH ERROR BOUNDS IN APPLIED PROBABILITY MODELS: EXPONENTIAL AND GEOMETRIC APPROXIMATIONS

Abstract

Frequently in probability work simple approximations are sought for mathematically intractable probability distributions. Limit theorems often supply the approximating distribution, but what is really needed are error bounds for fixed n or t.

In this talk I'll discuss some of my work over the years in error bounds for exponential and geometric distribution approximations. Points of interest include:

1) The waiting time for patterns in multinomial trials.
2) The first passage time to a set, A, for time reversible Markov chains.
3) The approximate exponentiality of geometric convolutions, with various applications.
4) The reliability of repairable systems.
5) Hazard function based bounds and inequalities.

on

Tuesday, May 31, 2016

(Refreshments will be served from 3:45 p.m. outside Room 301 Run Run Shaw Building)

4:00 p.m. – 5:00 p.m.

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