



**The Hong Kong Polytechnic University
Department of Applied Mathematics**

**Seminar
on**

Chaos from the Statistical Point of View

by

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Abstract

In this introductory talk, we explore the concept of chaos from a statistical point of view, which is a basic idea for the ergodic theory of chaotic dynamical systems. A class of positive operators called Frobenius-Perron operators will be introduced in an elementary way for the investigation of invariant measures that give statistical properties of chaotic maps. We also present structure-preserving numerical methods for approximating Frobenius-Perron operators, particularly the famous Ulam method.

Date : 25 May 2006 (Thursday)
Time : 2:30 – 3:30 p.m.
**Venue : Departmental Conference Room HJ610
The Hong Kong Polytechnic University**

*** * * ALL ARE WELCOME * * ***