

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

Seminar

Empirical Dynamic Modeling in Environmental Epidemiology

by

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Abstract

‘Empirical dynamic modeling (EDM)’ is a method, recently developed by the Sugihara Lab, to recover the dynamics from time series data and detect causality in nonlinear dynamic systems, where variables are interdependent and cannot be analyzed separately. These novel EDM methods are by no means of a ‘magic wand’ for causal inference in all empirical systems, but they have been continuously refined and have high potential in research areas with conflicting findings by conventional methods. In this talk, I will discuss my initial attempt to apply EDM in environmental epidemiology, the study of the distribution and environmental determinants of health. A few case studies would include the health effects of temperature, ozone, and carbon monoxide.

Date : 16 January, 2020 (Thursday)

Time : 10:00a.m. – 11:00a.m.

Venue : P116, The Hong Kong Polytechnic University

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