



DEPARTMENT OF APPLIED MATHEMATICS

應 用 數 學 系

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

**Colloquium**

**Model Reduction of Kinetic Equation: Progress and Future Work**

by

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**Peking University**

**Abstract**

In this talk, I will give a short review the new framework to the model reduction of kinetic equation. Based on this framework, it is guaranteed to derive a symmetric hyperbolic system as the reduced model, using any ansatz to the solution of the kinetic equation and any closure. Therefore, the local wellposedness of the reduced model is automatically attained. As the focus of the talk, I will introduce some possible new applications, which include some problem we have or are to be tried, such as refined boundary condition of NSF, model reduction of radiative transfer, and new numerical approach for density functional theory.

**Date : 28 August, 2017 (Monday)**

**Time : 11:00a.m. – 12:00noon**

**Venue : TU801, The Hong Kong Polytechnic University**

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