

Department of Mathematics **The Chinese University of Hong Kong**

數學系

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Kinetic Mini-Course

Classical diffusive limits for the linear Boltzmann equation and study of the Rosseland Approximation in Radiative transfer I

Dr. Ivan Moyano University of Cambridge

Abstract

We will review some classical and rigorous diffusion limits for the linear Boltzmann equation as studied in a series of papers by Bardos et al. (1985, 2013), both by using Hilbert series expansions and variational (energy) methods. We shall next introduce an example of nonlinear regime (the so-called Radative Transfer equation) for which the methods mentioned above does not allow to obtain a rigorous diffusive limit (Rosseland approximation).

Date: 9 April 2018 (Monday)

Time: 3:00pm - 5:00pm

Venue: Room 219, Lady Shaw Building,

The Chinese University of Hong Kong, Shatin