

Department of Mathematics

The Chinese University of Hong Kong

数字 ティップ・カー

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Colloquium Observable set, observability, interpolation and spectral inequality for heat equation

Professor Gengsheng Wang School of Mathematics and Statistics Wuhan University

Abstract

In this talk, we introduce three kinds of inequalities on the heat equation in the whole space. They are observable inequality, the Holder-type interpolation inequality and the spectral inequality. We present the geometric characteristic of observable sets. In more detail, we show that a measurable set is observable if and only if it is equally distributed. We also show that the above-mentioned three inequalities are equivalent.

Date: 13 April 2018 (Friday) Time: 3:30pm – 4:30pm

Venue: Room C3, Lady Shaw Building,

The Chinese University of Hong Kong, Shatin