

Department of Mathematics  
City University of Hong Kong

## Colloquium

Organised by Prof. Tong YANG and Prof. Tao LUO

### Large-time behavior of one-dimensional motion of non-viscous and heat-conductive ideal gas

by

Professor Akitaka Matsumura  
Professor Emeritus of Osaka University

**Abstract :**

In this talk, we make a survey on large-time behavior of solutions of one-dimensional systems for viscous/non-viscous and heat-conductive ideal gas. We first present the recent results on the Cauchy problem where the far field states are prescribed, in particular, remark that all the previous results on the viscous and heat-conductive case also hold even for the non-viscous and heat-conductive case. Second, we consider the initial boundary value problems on the half space, and emphasize the differences between viscous and non-viscous cases. Finally, we introduce some open problems and a related toy model.

**Date:** 10 January 2017 (Tuesday)  
**Time:** 4:30 – 5:30pm  
**Venue:** LT 10, Academic 1 (AC1)  
City University of Hong Kong

**\*\* All interested are welcome \*\***  
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