

The Hong Kong University of Science and Technology

Department of Mathematics

Seminar on PDE

On asymptotic speed for level set equations with source terms

By

Prof. Hiroyoshi MITAKE Hiroshima University

Abstract

In the talk, we will derive a level set equation with a Lipschitz continuous source term by using Trotter-Kato product formula, which can be described by a fully nonlinear, possibly degenerate, parabolic partial differential equation. We prove the existence of its asymptotic speed, that is the asymptotic time limit of u(x,t)/t, in a general setting, and investigate its qualitative properties. This talk is based on recent joint works with Y. Giga, T. Ohtsuka, and H. V. Tran.

Date: Monday, 13 November, 2017

Time: 2:00 p.m. - 3:00 p.m.

Venue: Room 4475, Academic Building

(near Lifts 25&26), HKUST

All are welcome!