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!