

*amended Apr 10, 2018

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

Computational Science Seminar

Viscosity Solutions of Hamilton-Jacobi Equations and Related Topics

Professor Yu-Yu Liu

National Cheng Kung University, Taiwan

Abstract

Motivated by vanishing viscosity limit of Burgers' equation, notion of viscosity solution of Hamilton-Jacobi equations will be introduced. The following topics will be surveyed, including existence and uniqueness results, optimal control and Hamilton-Jacobi-Bellman equations, periodic homogenization and numerical schemes. Then I will talk about the G -equation, a level set model in turbulent combustion.

Date: **April 12, 2018 (Thursday)***

Time: 10:00 – 11:00am

Venue: Room 210, Run Run Shaw Bldg., HKU

All are welcome