THE UNIVERSITY  OF HONG KONG

Institute of Mathematical Research

Department of Mathematics

MINI COURSE

Weak solutions to degenerate complex Monge-Ampère flows

Professor Ahmed Zeriahi

Université Paul Sabatier, Toulouse, France

Abstract

Studying the long-time behaviour of the Kähler-Ricci flow on mildly singular varieties, one is naturally lead to study weak solutions of degenerate parabolic complex Monge-Ampère equations. The purpose of these series of lectures is to explain how the theory of weak viscosity solutions can be developed in this setting. In particular our general theory allows to define and study the normalized Kähler-Ricci flow on projective varieties with canonical singularities generalizing results of J. Song and G. Tian.

Lecture 1:	May 18, 2015 (Monday) 2:00 – 3:30pm
Lecture 2:	May 19, 2015 (Tuesday) 2:30 – 3:30pm

Room 210, Run Run Shaw Bldg., HKU

All are welcome