



Department of Mathematics
The Chinese University of Hong Kong

數學系
香港中文大學

The Croucher Foundation Advanced Study Institute
Recent Development in Nonlinear Partial Differential Equations: Part I

Date: 1 March 2011

Venue: Rm. 501a, Academic Building 1, IMS, CUHK

Time	Date	1 March 2011 (Tuesday)
09:00am – 10:15am		Professor Wei Ming Ni <i>East China Normal University & University of Minnesota</i> Title: The Mathematics of Diffusion Diffusion, Directed Movements, and Spatial Heterogeneity in Mathematical Ecology (Part III)
10:15am – 10:45am		Tea Break
10:45am – 12:00pm		
12:00pm – 02:00pm		
02:00pm – 02:45pm		
02:45pm – 03:30pm		
03:30pm – 04:00pm		Free
04:00pm – 04:45pm		
04:45pm – 05:30pm		
06:00pm – 08:00pm		

The Mathematics of Diffusion
Diffusion, Directed Movements, and Spatial Heterogeneity in Mathematical Ecology

Professor Wei-Ming Ni
Center for PDE, East China Normal University
and
School of Mathematics, University of Minnesota

Abstract

In this series of lectures, starting from a single logistic equation, I will describe the interactions between diffusion and spatial heterogeneity in Lotka-Volterra competition systems. Various phenomena in mathematical ecology will be compared in both homogeneous and inhomogeneous environments. Directed movements will be considered as well.