MEMORIAL
UNIVERSITY

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Departmental
Colloquium

Speaker: Dr. Chufen Wu

Affiliation: Shanghai Jiaotong University, China

Date: Friday, December 16, 2011

Time: 1:00 p.m.

Room: HH-3017

Title: **Traveling Waves in A Diffusive Predator-Prey System of Holling Type: Point-to-Point and Point-to-Periodic Heteroclinc Orbits**

Abstract:

In this talk, I will report my recent research on the existence of small amplitude traveling wave train solutions and two kinds of traveling wave solutions for a diffusive predator-prey system with general Holling type functional response. This problem reduces to the existence of periodic orbits, point-to-point connection, and point-to-periodic orbit connection for the associated wave profile equation. I will also discuss the minimal wave speed and biological invasion for such a model.