

Applied Dynamical Systems Seminar

**Zhen Wang,
Memorial University**

**February 3, 2012,
HH-3017, 1:00p.m.**

Global Dynamics of A Time-Delayed Dengue Transmission Model

Abstract:

In this talk, I will report our recent research on a time-delayed dengue transmission model. We first introduce the basic reproduction number for this model and show that it serves as a threshold parameter that predicts whether the disease will persist or not. We further establish a set of sufficient conditions for the existence and global attractivity of the endemic equilibrium by the method of fluctuations. This talk is based on the joint work with Dr. Xiaoqiang Zhao.