

Program Schedule

(Lecture Room: Henrietta Harvey 3017)

August 13, Morning, Chair: Xiaoqiang Zhao

9:00 - 9:10am Opening (Welcome)

9:10 - 9:50am Andy Foster: Effects of caffeine on the human sleep-wake cycle

9:55 - 10:35am David Iron: Roll of cellular geometry in the formations of morphogen patterns

10:35 - 10:45am Group photo

10:45 - 11:05am Coffee break

11:05 - 11:45am Wendi Wang: Adaptive dispersals of populations between two patches

11:50 - 12:30pm Hongying Shu: Impact of mitosis and intracellular delay on viral dynamics: stability, and bifurcation analysis

12:30 - 2:00pm Lunch

August 13, Afternoon, Chair: Yuan Yuan

2:00 - 2:40pm James Watmough: Switching-type neural network models for the task-regulation in honey bee colonies

2:45 - 3:25pm Xiangsheng Wang: Asymptotic analysis in migration ecology and simple SIR epidemiology

3:25 - 3:45pm Coffee break

3:45 - 4:25pm Lin Wang: Backward bifurcation induced by proliferation of T cells in an HIV model

4:30 - 5:10pm Chris Levy: Model of cell signal transduction in a 3-dimensional domain

6:00 - 8:30pm Reception at Citylight Restaurant

August 14, Morning, Chair: James Watmough

9:00 - 9:40am Xiaoqiang Zhao: Global dynamics of a reaction and diffusion model for Lyme disease

9:45 - 10:25am Rui Peng: A reaction-diffusion SIS epidemic model in a periodic environment

10:25 - 10:45am Coffee break

10:45 - 11:25pm Matt Calder: Estimates for solutions of the planar and scalar reductions of the Michaelis-Menten mechanism

11:30 - 12:10pm Yuxiang Zhang: Bistable travelling waves in competitive recursion systems

12:10 - 2:00pm Lunch

August 14, Afternoon, Chair: Andy Foster

2:00 - 2:40pm Yuan Yuan: A coupled plankton system with instantaneous and delayed predation

2:45 - 3:25pm Xin Li: A diffusion model for sterile insect release method with release only on the boundary of the habitat

3:25 - 3:45pm Coffee break

3:45 - 4:25pm Mohammadkheer Al-Jararha: Age-structured population dynamics: age-dependent diffusion and death rates, and their applications to the cell population

4:30 - 5:10pm Xi Hu: Mathematical model with diatom, corophium and snail