## YUMING CHEN, Wilfrid Laurier University

Multiple epidemic waves in delayed SIR models on complex networks

We consider a delayed SIR epidemic model on an uncorrelated complex network and address the effect of time lag on the shape and multiple waves of epidemic curves. We show that when the transmission rate is above a threshold, large delay can cause multiple waves with larger amplitudes in the second and subsequent waves. This is a joint work with Dr. Shaofen Zou and Professor Jianhong Wu.