

# Applied Dynamical Systems Seminar

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Monday, October 20, 2014  
10:00 - 11:00 a.m., HH-3026

**A Reaction-Advection-Diffusion Competition Model in A Periodic Habitat:  
I. Competitive exclusion and spatial dynamics**

## **Abstract:**

In this talk, I will report our recent research on a reaction-advection-diffusion competition model in a periodic habitat. I will present the result on the global attractivity of a semi-trivial spatially periodic steady state (i.e., the competitive exclusion) in terms of principal eigenvalues. Then I will introduce the newly developed theory of traveling waves and spreading speeds for monotone semiflows in a periodic habitat.

This is a joint work with Dr. Xiaoqiang Zhao.