RUIWEN WU, Memorial University of Newfoundland

Propagation Dynamics for a Spatially Periodic Integrodifference Competition Model

In this talk, I will report our recent research on the propagation dynamics for a class of integrodifference competition models in a periodic habitat. An interesting feature of such a system is that multiple spreading speeds can be observed, which biologically means different species may have different spreading speeds. We show that the model system admits a single spreading speed, and it coincides with the minimal wave speed of the spatially periodic traveling waves. A set of sufficient conditions for linear determinacy of the spreading speed is also given. This talk is based on a joint work with Dr. Xiaoqiang Zhao.