Yuan Lou* (lou@math.ohio-state.edu), Department of Mathematics, Columbus, OH 43210.

Finding ESS in Spatial Models.

From habitat degradation and climate change to spatial spread of invasive species, dispersal plays a central role in determining how organisms cope with a changing environment. How should organisms disperse “optimally” in heterogeneous environments? I will discuss some recent development on the evolution of dispersal, focusing on finding evolutionarily stable strategies (ESS) for dispersal. This talk is mostly based upon joint works with Steve Cantrell, Chris Cosner and King-Yeung (Adrian) Lam. (Received January 08, 2014)