

11:00 AM, THURSDAY, APRIL 12, 2007, BOYD 302

Speaker: **Prof. Chris Cosner**, Department of Mathematics, University of Miami, Miami, Florida

Title: **Spatial Models in Ecology**

Simple models in population dynamics and ecology such as the logistic equation do not consider the spatial distribution of organisms. There are a number of phenomena where the dispersal and spatial distribution of organisms are important. Those include ecological invasions, persistence or extinction of populations in patchy or fragmented environments, spatial patterning of populations, and various effects mediated by the presence of habitat edges. Various extensions of simple population models have been developed to address these issues. In this talk I will describe some of those types of spatial models and the ways they are used. Most of the models are based on differential or difference equations. This talk is intended for a general audience including undergraduate students in mathematics and biology.

(Contact person: Dr. Nguyen Van Minh, 678-839-4130)