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Amy Veprauskas*, aveprauskas@louisiana.edu. *Synchrony and the dynamic dichotomy in a class of matrix population models.*

In this talk, I will discuss the dynamics of a class of discrete-time structured population models called synchrony models. Synchrony models are characterized by the simultaneous bifurcation of a branch of positive equilibria and a branch of synchronous 2-cycles from the extinction equilibrium. These models exhibit a dynamic dichotomy in which the two steady states have opposite stability properties that are determined by the relative levels of competition in the population. I will also present an application that is motivated by observations of a cannibalistic gull population. (Received September 17, 2016)