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Jia Li* (li@math.uah.edu), Department of Mathematical Sciences, University of Alabama in Huntsville, Huntsville, AL 35899, and **Yang Li**, Department of Mathematical Sciences, University of Alabama in Huntsville, Huntsville, AL 35899. *Discrete-time models for interactive wild and sterile mosquito populations and impact of releases of sterile mosquitoes on malaria transmission*. Preliminary report.

In this talk, we present discrete-time models for the interactive wild and sterile mosquitoes. The population dynamics of the mosquitoes are based on Beverton-Holt type of nonlinearity. We consider different strategies for the releases of sterile mosquitoes in the models and investigate the model dynamics. We then include the mosquito populations into malaria disease models and study the impact of releases of sterile mosquitoes on the disease transmissions. (Received September 20, 2016)