1143-35-548 **Michael Winkler** (michael.winkler@math.uni-paderborn.de), 80305 Paderborn, Germany, and **Nancy Rodriguez*** (rodrign@colorado.edu), Boulder, CO 80305. *On the global existence and qualitative behavior of solutions to a model for urban crime.*

We consider the no-flux initial-boundary value problem for the cross-diffusive evolution system which was introduced to describe the dynamics of urban crime. In bounded intervals I will first discuss the existence of global classical solutions for all reasonably regular non-negative initial data. Next I will address the issue of determining the qualitative behavior of solutions. Finally, I will conclude with some numerical simulations exploring possible effects that may arise when considering large cross diffusion terms not covered by our qualitative analysis. (Received August 21, 2018)