

Propagation results for the cane toads equation

Emeric Bouin, CEREMADE, Paris-Dauphine University

Structured models have raised a lot of interest in multiscale modelling of collective motion and dispersal evolution. A minimal reaction-diffusion model has been proposed by Benichou et al. to model the propagation of some invasive species with a high heterogeneity in dispersal capability among individuals. I will present some recent progresses about the qualitative and quantitative study of spreading for this model and related ones. In particular, we will highlight an acceleration phenomena that has intrigued field biologists in the last decade.