1126-35-10   **Nancy Rodriguez*** (`nrod@unc.edu`), 100 Rock Spring Ct, Carrboro, NC 27510. *On the obstruction and propagation of entire solutions to a non-local reaction diffusion equation with a gap.*

In this talk I will discuss the propagation properties of a bistable spatially heterogeneous reaction-diffusion equation where the diffusion is generated by a jump process. Here the spatial heterogeneity is due to a small region with decay. First, I will focus on the existence of a "generalized transition front". Then I will give some partial results about propagation and obstruction of the transition front. Throughout the talk I will point out many interesting differences between the non-local and local reaction-diffusion equations. (Received October 05, 2016)