1129-35-379 **Jessica Lin*** (jessica@math.wisc.edu) and **Andrej Zlatos** (zlatos@ucsd.edu). *Stochastic Homogenization for Reaction-Diffusion Equations.*

We consider heterogeneous reaction-diffusion equations with a random ignition or KPP-type nonlinearity. Under certain hypotheses on the environment, we show that the typical large-time large-scale behavior of solutions is governed by a deterministic Hamilton-Jacobi equation modeling front propagation. In particular, we prove the existence of asymptotic, deterministic speeds of propagation for solutions with both spark-like and front-like initial data. Such models are relevant for predicting the evolution of a population or the spread of a fire in a heterogeneous environment. (Received March 20, 2017)