1125-91-1038   **Kristina B. Hilton*** (`khilton@mail.usf.edu`), Department of Mathematics and Statistics, University of South Florida, 4202 E. Fowler Ave., CMC 342, Tampa, FL 33620-5700, and **G. S. Ladde** (`gladde@usf.edu`), Department of Mathematics and Statistics, University of South Florida, 4202 E. Fowler Ave., CMC 342, Tampa, FL 33620-5700. *Mutli-Cultural Networks Under Internal and External Stochastic Perturbations.* Preliminary report.

Using Lyapunov type functions and comparison theorems, we explore the dynamics of a multi-cultural network under random environmental and structural perturbations. We examine the long-term behavior of members of the network. Moreover, we characterize various cultural state invariant sets within the network. Further, we present numerical models as a means of comparison between simulation results and various type of computational bounds. (Received September 14, 2016)