1024-92-264　　　　**M M Rahman\*** (`mrahman@unf.edu`), 4567 St. Johns Bluff Rd., South, Dept of Mathematics and Statistics, University of North Florida, Jacksonville, FL 32224. *Noise-induced wave propagation in weakly connected network and stochastic convergence.*

We show the role of noise in a weakly connected neural network of neuron of class I excitable system arises in mathematical neurosciences. We show that relatively large variance of noise in the network does sustain the propagation. We support our result using strong conversence in stochastic system (Received January 11, 2007)