

[P6] Self-Organized Criticality of Neural Avalanche in a Neural Model on Complex Networks

Nam Jung, Inha university

Avalanche size distribution of neural signals from a variety of neural model represents the Power Law. In LHG Model (Levina, Herrmann, Geisel, Nat. Phys. 20xxx) which kind of Integrate-Fire Model, neural firing signals distribution exhibited a self-organized criticality. Critical exponent of the neural firing signal distribution in a fully connected neural network showed a value near 1.5. Self-organized criticality of LHG model were confirmed by computer simulations when the connection of neurons have a complex network structure. confirm how changed critical exponent of neural firing signal distribution depending on Depending on the structure of complex network.