

Dynamics of a small network of spiking neurons

Michael Stich and Manuel G. Velarde

Instituto Pluridisciplinar, Universidad Complutense de Madrid, Paseo Juan XXIII 1, 28040 Madrid.

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We investigate the dynamics of a small network of spiking neurons and present numerical results for different neuron models. The structure of the network is motivated by models of Central Pattern Generators and contains excitatory and inhibitory connections among the neurons. Our focus lies on the dependence of the temporal dynamics of a given output neuron on the input of the network. The effect of noise on the behavior of the system is discussed.