

Effects of Interactive Function Forms and Refractoryperiod in a Self-Organized Critical Model Based on Neural Networks

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Abstract: Based on the standard self-organizing map neural network model and an integrate-and-fire mechanism, we investigate the effect of the nonlinear interactive function on the self-organized criticality in our model. Based on these we also investigate the effect of the refractoryperiod on the self-organized criticality of the system.

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Key words: self-organized criticality, avalanche, neuron networks, refractoryperiod

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