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Beggs JM, Plenz D

J Neurosci 2003 Dec 3 **23**(35):11167-77 [abstract on PubMed] [related articles] [order article] IUSLink

Selected by | Xiao-Jing Wang / David Pinto / Alain Destexhe
First evaluation 24 Mar 2004 | Latest evaluation 24 Jun 2004

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Alain Destexhe CNRS, France NEUROSCIENCE New Finding	**The authors investigate the dynamics of recurrent patterns of network activity in neocortical slices and cultures using multielectrode arrays. The main finding is that the activity spreads according to power laws typical of avalanche phenomena (self-organized criticality), which represents a clear-cut experimental evidence that this type of dynamics applies to neuronal networks.** The authors quantified the spread of activity according to a "branching parameter", which was close to unity, suggesting that these dynamics may be optimal for information transmission. Evaluated 24 Mar 2004 cite this evaluation

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