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Title:	Cluster formation in populations of coupled chaotic neurons
Authors:	Sinha, Sudeshna (/jspui/browse?type=author&value=Sinha%2C+Sudeshna)
Keywords:	Cluster formation Coupled chaotic model Global coupling Distance-dependent coupling
Issue Date:	2013
Publisher:	Springer Link
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Abstract:	We investigate cluster formation in populations of coupled chaotic model neurons under homogeneous global coupling, and distance-dependent coupling, where the coupling weights between neurons depend on their relative distance. Three types of clusters emerge for global coupling: synchronized cluster, two state cluster and anti-phase cluster. In addition to these, we find a novel three state cluster for distance-dependent coupling, where the population splits into two synchronized groups and one incoherent group. Lastly, we study a system with random inhomogeneous coupling strengths, in order to discern if the special pattern found in distance-dependent coupling arises from the underlying lattice structure or from the inhomogeneity in coupling.
Description:	Only IISERM author are available in the record.
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