

Logarithmically slow onset of synchronization

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Here we investigate specifically the transient of a synchronizing system, considering synchronization as a relaxation phenomenon. The stepwise establishment of synchronization is studied in the system of dynamically coupled maps introduced by Ito & Kaneko (Phys. Rev. Lett., 88, 028701, 2001 & Phys. Rev. E, 67, 046226, 2003), where the plasticity of dynamical couplings might be relevant in the context of neuroscience. We show the occurrence of logarithmically slow dynamics in the transient of a fully deterministic dynamical system.

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