

Control of Spatiotemporal Chaos via Nonlinear Feedback

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Spatiotemporal systems are usually an organized ensemble of dynamical subsystems whose have nonlinear behaviors. The response of their variables to any input signal can influence its spatiotemporal behavior. This paper attempts to control the dynamical response of diffusively coupled map lattice via a external input applied to each variables individually. A nonlinear feedback method is proposed for controlling the spatiotemporal chaos of diffusively coupled map lattice. Controller is an on-off control which is inspired from OGY method. Simulation results are shown the feasibility and effectiveness of the proposed control method.