

Controlling Chaos with Rectificative Feedback Injections in 2D Coupled Complex Ginzburg-Landau Oscillators

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Abstract: A model of two-dimensional coupled complex Ginzburg-Landau oscillators driven by a rectificative feedback controller is used to study controlling spatiotemporal chaos without gradient force items. By properly selecting the signal injecting position with considering the maximum gap between signals and targets, and adjusting the control time interval, we have finally obtained the efficient chaos control via numerical simulations.

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Key words: chaos control, spatiotemporal chaos, coupled complex Ginzburg-Landau oscillators

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