

Coexistence of Two Different Types of Intermittency near the Boundary of Phase Synchronization in the Presence of Noise

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Abstract : Intermittent behavior near the boundary of phase synchronization in the presence of noise is studied. In certain range of the coupling parameter and noise intensity the intermittency of eyelet and ring intermittencies is shown to take place. Main results are illustrated using the example of two unidirectionally coupled Rössler systems. Similar behavior is shown to take place in two hydrodynamical models of Pierce diode coupled unidirectionally.

Keywords : chaotic oscillators, phase synchronization, noise, intermittency of intermittencies

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