

Control of Spiral Waves and Spatiotemporal Chaos by Exciting Travel Wave Trains

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Abstract: Spiral waves and spatiotemporal chaos usually are harmful and need to be suppressed. In this paper, a method is proposed to control them. Travel wave trains can be generated by periodic excitations near left boundary, spiral waves and spatiotemporal chaos can be eliminated by the trains for some certain excitation periods. Obvious resonant behavior can be observed from the relation between the periods of the trains and excitation ones. The method is against noise.

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