

IMPULSIVE SYNCHRONIZATION AND ITS IMPLEMENTATION IN CHEN - LEE SYSTEMS

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Abstract

The impulsive synchronization of two chaotic Chen - Lee systems was investigated in this paper. Based on Lyapunov' s direct method, sufficient conditions for the global exponential synchronization and global asymptotical synchronization were derived. Further, the theoretical results were verified by a numerical simulation. In addition, the impulsive synchronization of two chaotic Chen - Lee systems was also implemented using an electronic circuit.

Keyword : Impulsive synchronization; Chen - Lee system; Lyapunov' s direct method