

Partial Generalized Synchronization Theorems of Differential and Discrete Systems

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Abstract: This paper presents two theorems for designing controllers to achieve directional partial generalized synchronization (PGS) of two independent (chaotic) differential equation systems or two independent (chaotic) discrete systems. Two numerical simulation examples are given to illustrate the effectiveness of the proposed theorems. It can be expected that these theorems provide new tools for understanding and studying PGS phenomena and information encryption.

Keywords: partial generalized synchronization; differential system; discrete system;

AMS Subject Classification: 34K23; 34K99;

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