

Function Projective Synchronization between Two Different Chaotic Systems

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Z. Naturforsch. **62a**, 29–33 (2007); received October 13, 2006

A function projective synchronization is defined to synchronize two different systems up to a scaling function matrix f with different initial values. The function projective synchronization is more general than the complete synchronization, the generalized projective synchronization and the modified projective synchronization. The corresponding framework of synchronization is set up and used to achieve a function projective synchronization design of two different chaotic systems: the unified chaotic system and the Rössler system. Feasibility of the proposed control scheme is illustrated through the numerical simulation.

Key words: Generalized Projective Synchronization; Function Projective Synchronization; Rössler System; Unified Chaotic System.