

# Chaos Quasi-synchronization Induced by Impulses with Parameter Mismatches

**Abstract.** This paper studies the effect of parameter mismatch on the impulsive synchronization of a class of coupled chaotic systems. A new definition for global quasi-synchronization is introduced and used to analyze the synchronous behavior of coupled chaotic systems in the presence of parameter mismatch. Using the linear decomposition and comparison-system methods, a global synchronization error bound together with a sufficient condition is derived. Numerical simulations on the chaotic Chua's circuit are presented to verify the theoretical results.