



**INTERMITTENT SYNCHRONIZATION OF TIME-VARYING  
DELAYS NEURAL NETWORKS USING  
SAMPLED-DATA CONTROL**

Zhang Qunli

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**Abstract**

This paper further investigates the synchronization problem of neural networks with time-varying delays under general intermittent and sampled-data control. The generic synchronization criteria are obtained by constructing the new discontinuous Lyapunov functionals, which are based on the piecewise sawtooth structure of the sampling in time and intermittent control theory, and by the effective linear matrix inequality. Finally, the numerical examples are taken to show the effectiveness of the proposed approach.

**Keywords and phrases:** discontinuous Lyapunov functionals, neural networks, sampled-data control, general intermittent control, synchronization.

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