



# Robustly Global Exponential Stability of Time-varying Linear Impulsive Systems with Uncertainty<sup>†</sup>

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**Abstract:** This paper studies linear impulsive systems with varying time-delay and uncertainty. By using the method of the variation of constants formula for impulsive system, robustly global exponential stability criteria are established in terms of fairly simple algebraic conditions. Estimate of the decay rate of the solutions of such systems are also derived. Some examples are given to illustrate the main results.

**Keywords:** *Uncertainty; linear impulsive system; interval matrix; robustly global exponential stability; decay rate.*

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