

Exponential Stability for Differential Equations with Random Impulses at Random Times

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The modeling of real world phenomena in which the state of the investigated process changes instantaneously at uncertain moments, requires application of impulsive differential equations with impulses occurring at random times. The investigations of such kind of differential equations combine ideas of qualitative theory of differential equations and probability theory. In this paper the statement of differential equations with randomly occurring impulses is given and p-moment exponential stability of the solutions is studied.