

# Second-Order Impulsive Differential Systems: Oscillation Tests and Applications

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## Abstract

Impulsive differential equations of second-order appears in numerous applications such as fluid dynamics, electromagnetism, quantum mechanics, neural networks and the field of time symmetric electrodynamics. The aim of this work is to establish necessary and sufficient conditions for the oscillation of the solutions to a second-order neutral differential equation with impulses. Two examples are given and state an open problem.

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