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Strongly nonlinear impulsive evolution equations and optimal control[☆]

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Abstract

Strongly nonlinear impulsive evolution equations are investigated. Existence of solutions of strongly nonlinear impulsive equations is proved and some properties of the solutions are discussed.

These results are applied to Lagrange problems of optimal control and we proved existence results. For illustration, an example of a quasi-linear impulsive parabolic differential equation and the corresponding optimal control is also presented.

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