

RESULTS OF EXISTENCE OF SOLUTIONS FOR SOME VARIATIONAL CONTROL INEQUALITIES*

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Dedicated to Dr. Dan Tiba on the occasion of his 70th anniversary

Abstract

The paper deals with the study of solutions for some weak variational control inequalities of vector type, and the efficient solutions to the corresponding optimization problem. More exactly, to formulate and prove the principal results, we consider the Fréchet differentiability, the concept of invex set, and invexity & pseudoinvexity of the curvilinear integral type functionals which are involved in the study.

MSC: 26B25, 49J40, 90C30.

keywords: invex set; (weak) efficient solution; curvilinear integral; Fréchet differentiability.

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