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Characterizations of relatively generalized monotone maps

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Abstract

New concepts of relative monotonicity were introduced in Konnov (Oper Res Lett 28:21-26, 2001a) which extend the usual ones. These concepts enable us to establish new existence and uniqueness results for variational inequality problems over product sets. This paper presents first-order characterizations of new (generalized) monotonicity concepts. Specialized results are obtained for the affine case. © Springer-Verlag 2007.

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Keywords

Affine maps, Differentiable maps, Relatively generalized monotone maps