ENLARGEMENT OF MONOTONE VECTOR FIELDS AND AN INEXACT PROXIMAL POINT METHOD FOR VARIATIONAL INEQUALITIES IN HADAMARD MANIFOLDS

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Resumo/Abstract:
In this work an inexact proximal point method for variational inequalities in Hadamard manifolds is introduced and studied its convergence properties. The main tool used for presenting the method is the concept of enlargement of monotone vector fields, which generalizes the concept of enlargement of monotone operators from the linear setting to the Riemannian context. As an application, an inexact proximal point method for constrained optimization problems is obtained.

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