

A combined relaxation method for variational inequalities with nonlinear constraints

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Abstract

A simple iterative method for solving variational inequalities with a set-valued, nonmonotone mapping and a convex feasible set is proposed. This set can be defined by nonlinear functions. The method is based on combining and extending ideas contained in various relaxation methods of nonsmooth optimization. Also a modification of the averaging method for the problem under consideration is proposed. © 1998 The Mathematical Programming Society, Inc. Published by Elsevier Science B.V.

Keywords

Combined relaxation method, Nonlinear constraints, Set-valued mapping, Variational inequalities