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A splitting type algorithm for multi-valued complementarity problems

Konnov I.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

We consider a generalized complementarity problem whose cost mapping is multi-valued and is the sum of upper Z and antitone mappings. We suggest a simple splitting type algorithm which utilizes an extended Jacobi iteration. Its convergence is proved under mild assumptions. Preliminary results of numerical experiments confirm efficiency of the algorithm presented. © Springer-Verlag 2009.

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Keywords

Antitone mappings, Complementarity problem, Jacobi algorithm, Multi-valued mappings, Splitting algorithm, Z-mappongs