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Combined relaxation method for mixed equilibrium problems

Konnov I., Schaible S., Yao J.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

We consider a general class of equilibrium problems which involve a single-valued mapping and a nonsmooth bifunction. Such mixed equilibrium problems are solved with a combined relaxation method using an auxiliary iteration of a splitting-type method for constructing a separating hyperplane. We prove the convergence of the method under the assumption that the dual of the mixed equilibrium problem is solvable. Convergence rates are also derived. © 2005 Springer Science+Business Media, Inc.

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Keywords

Combined relaxation methods, Generalized monotone bifunctions, Mixed equilibrium problems, Splitting-type methods