

A proximal point method with generalized distances for a class of bilevel equilibrium problems

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Abstract

We consider a bilevel problem involving two pseudomonotone equilibrium bifunctions and we show that this problem can be solved by an interior proximal point method with generalized distances. We propose a framework for the convergence analysis of the sequences generated by the algorithm. This class is very interesting because it covers mathematical programs and optimization problems over equilibrium constraints.

keywords: Equilibrium problem; bilevel problem; interior proximal point method; generalized distance.

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