Iterative methods for solving monotone equilibrium problems via dual gap functions

Quoc T.D., Muu L.D.

Hanoi University of Science, Hanoi, Viet Nam; Department of Electrical Engineering (ESAT/SCD) and OPTEC, K.U. Leuven, Leuven, Belgium; Institute of Mathematics, Hanoi, Viet Nam

Abstract: This paper proposes an iterative method for solving strongly monotone equilibrium problems by using gap functions combined with double projection-type mappings. Global convergence of the proposed algorithm is proved and its complexity is estimated. This algorithm is then coupled with the proximal point method to generate a new algorithm for solving monotone equilibrium problems. A class of linear equilibrium problems is investigated and numerical examples are implemented to verify our algorithms. © 2010 Springer Science+Business Media, LLC.

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Correspondence Address: Quoc, T.D.; Hanoi University of Science, Hanoi, Viet Nam; email:

quoc.trandinh@esat.kuleuven.be

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Authors with affiliations:

• Quoc, T.D., Hanoi University of Science, Hanoi, Viet Nam, Department of Electrical Engineering (ESAT/SCD) and OPTEC, K.U. Leuven, Leuven, Belgium

• Muu, L.D., Institute of Mathematics, Hanoi, Viet Nam