Iterative methods for solving monotone equilibrium problems via dual gap functions

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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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