Splitting Extragradient-like Algorithms for Strongly Pseudomonotone Equilibrium Problems

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Abstract: In this paper, two splitting extragradient-like algorithms for solving strongly pseudomonotone equilibrium problems given by a sum of two bifunctions are proposed. The convergence of the proposed methods is analyzed and the R-linear rate of convergence under suitable assumptions on bifunctions is established. Moreover, a noisy data case, when a part of the bifunction is contaminated by errors, is studied. Finally, some numerical experiments are given to demonstrate the efficiency of our algorithms.

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