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Self adaptive inertial extragradient algorithms for solving bilevel pseudomonotone variational inequality problems

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Abstract

We introduce two inertial extragradient algorithms for solving a bilevel pseudomonotone variational inequality problem in real Hilbert spaces. The advantages of the proposed algorithms are that they can work without the prior knowledge of the Lipschitz constant of the involving operator and only one projection onto the feasible set is required. Strong convergence theorems of the suggested algorithms are obtained under suitable conditions. Finally, some numerical examples are provided to show the efficiency of the proposed algorithms.

Keywords

Author Keywords: Inertial subgradient extragradient method; Inertial Tseng'; s extragradient method; Steepest descent method; Bilevel variational inequality problem; Pseudomonotone mapping

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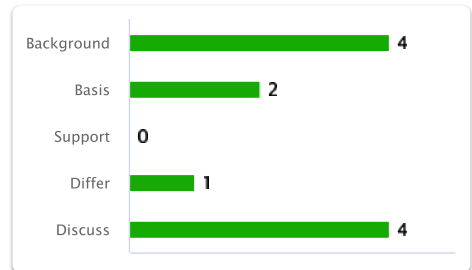
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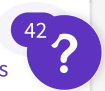
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