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Self Adaptive Viscosity-Type Inertial Extragradient Algorithms for Solving Variational Inequalities with Applications

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Abstract

In this paper, we introduce two new inertial extragradient algorithms with non-monotonic stepsizes for solving monotone and Lipschitz continuous variational inequality problems in real Hilbert spaces. Strong convergence theorems of the suggested iterative schemes are established without the prior knowledge of the Lipschitz constant of the mapping. Finally, some numerical examples are provided to illustrate the efficiency and advantages of the proposed algorithms and compare them with some related ones.

Keywords

Author Keywords: variational inequality problem; optimal control problem; inertial subgradient extragradient method; inertial Tseng extragradient method; viscosity method

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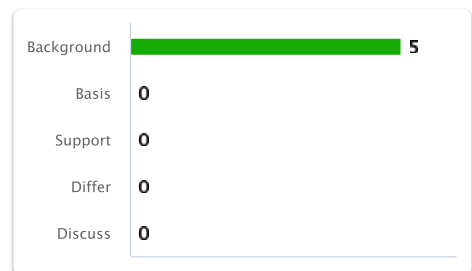
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