A MODIFIED PROJECTION AND CONTRACTION METHOD FOR A CLASS OF LINEAR COMPLEMENTARITY PROBLEMS

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Abstract Recently, we have proposed an iterative projection and contraction (PC) method for a class of linear complementarity problems (LCP)$^{[4]}$. The method was showed to be globally convergent, but no statement could be made about the rate of convergence. In this paper, we develop a modified globally linearly convergent PC method for linear complementarity problems. Both the method and the convergence proofs are very simple. The method can also be used to solve some linear variational inequalities. Several computational experiments are presented to indicate that the method is surprising good for solving some known difficult problems.

Key words

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