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On the Convergence of a New Hybrid Projection Algorithm

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摘要 For unconstrained optimization, a new hybrid projection algorithm is presented in the paper. This algorithm has some attractive convergence properties. onvergence theory can be obtained under the condition that $\nabla f(x)$ is uniformly continuous. If $\nabla f(x)$ is continuously differentiable pseudo-convex, the whole sequence of iterates converges to a solution of the problem without any other assumptions. Furthermore, under appropriate conditions one shows that the sequence of iterates has a cluster-point if and only if ${\it \Omega} ^*\neq\emptyset$. Numerical examples are given at the end of this paper.

关键词 Global convergence hybrid projection unconstrained optimization

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