

论文

带误差的合成隐迭代新算法

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摘要:

该文参照Banach压缩映象原理 合理地引进了一涉及有限族渐进非扩张映象的具误差的合成隐迭代式. 在适当条件下 证得了该迭代序列给出的序列弱收敛与强收敛到有限族 渐进非扩张映象的一公共不动点, 并 由此得出该合成隐迭代式导出的一非隐迭代算法的弱收敛 与强收敛的新定理. 值得一提的是, 这是在未增加任何附加条件的情况下 将2006年一文献的主要结果由隐迭代算法改进为非隐的显式迭代算法.

关键词: 一致凸性 渐进非扩张映象 公共不动点

分类号:

47H09; 65J15

New Composite Implicit Iterative Scheme With Errors

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Abstract:

In this paper, a new composite implicit iterative process with errors for a family of asymptotically nonexpansive mappings was reasonably introduced in view of Banach's contraction principle, and a new theorem for weak and strong convergence was obtained under some suitable conditions, which deduced a new convergent theorem for a non-implicit iterative process with errors. It is worthy to say that this result extend the corresponding results of S.S.Chang [1] from implicit iterative process to non-implicit algorithm without any additive assumptions.

Keywords: Uniform convexity Asymptotically nonexpensive mappings Common fixed point

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