

赋范线性空间中渐近拟伪压缩型映象不动点的修改的广义Ishikawa迭代逼近

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Modified Generalized Ishikawa Iterative Approximations of Fixed Points for Asymptotically Quasi Pseudocontractive Type Mappings in Normed Linear Spaces

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- 摘要
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摘要 本文在去掉 $\liminf_{n \rightarrow \infty} \|x_n\| < \infty, \sum_{n=0}^{\infty} (k_n - 1) < \infty$ 条件下, 并用 $a_n \rightarrow 0 (n \rightarrow \infty)$ 取代 $\sum_{n=0}^{\infty} \alpha_n^2 < \infty$, 使用新的分析技巧, 在赋范线性空间中建立了一致Lipschitz的渐近拟伪压缩型映象公共不动点的修改的广义Ishikawa迭代序列的强收敛定理, 从而本质改进和推广了唐玉超, 刘理蔚新近的结果.

关键词: 赋范线性空间 渐近拟伪压缩型映象 公共不动点 修改的广义Ishikawa迭代序列

Abstract: Under the condition of removing the restriction ; $\liminf_{n \rightarrow \infty} \|x_n\| < \infty, \sum_{n=0}^{\infty} (k_n - 1) < \infty$, and

substituent ; $\sum_{n=0}^{\infty} \alpha_n^2 < \infty$, with $a_n \rightarrow 0 (n \rightarrow \infty)$, strong convergence theorems of modified generalized

Ishikawa iterative sequences of common fixed point for uniformly Lipschitzian asymptotically quasi pseudocontractive type mappings in normed linear spaces are established by using a new analytical method, which essentially improve and extend some recent results obtained by Tang Y C and Liu L W.

Key words: normed linear spaces asymptotically quasi pseudocontractive type mapping common fixed point modified generalized Ishikawa iterative sequensces

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