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A COMMON FIXED POINT THEOREM FOR A PAIR OF QUASI-NONEXPANSIVE AND NEARLY ASYMPTOTICALLY NONEXPANSIVE MAPPINGS

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Abstract

The purpose of this paper is to establish the strong convergence of modified generalized Ishikawa iterative sequence for a pair of quasi-nonexpansive and nearly asymptotically nonexpansive mappings in a uniformly convex Banach space. The result in this paper generalizes, improve and unify the strong convergence results due to Liu and Kang [13], Liu, Agarwal, Feng and Kang [14], Osilike and Aniagbosor [17], Rhoades [18], Sharma and Sahu [20], Schu ([21], [22]), Tan and Xu ([25], [26]), Zeng [27], and others.

Key Words and Phrases : Quasi-nonexpansive mappings, Nearly asymptotically nonexpansive mappings, Modified generalized Ishikawa iteration process.