STRONG AND WEAK CONVERGENCE THEOREMS FOR SPLIT COMMON FIXED PROBLEM OF ASYMPTOTICALLY QUASI-NONEXPANSIVE MAPPINGS

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Abstract

An iterative algorithm is introduced to solve the split common fixed point problems for asymptotically quasi-nonexpansive mappings in Hilbert spaces. The strong and weak convergence of the presented algorithm to some split common fixed point are obtained. The results presented in this paper improve and extend some recent results of Moudafi [Nonlinear Anal. 74 (2011), 4083-4087], Xu [Inverse Problems 26 (2010), 105018], Yang [Inverse Problems 20 (2004), 1261-1266] and others.