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Convergence theorems for equilibrium problem, variational inequality problem and countably infinite relatively quasi-nonexpansive mappings

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ABSTRACT

In this paper, we introduce an iterative process which converges strongly to a common element of set of common fixed points of countably infinite family of closed relatively quasi-nonexpansive mappings, the solution set of generalized equilibrium problem and the solution set of the variational inequality problem for a γ -inverse strongly monotone mapping in Banach spaces. Our theorems improve, generalize, unify and extend several results recently announced.