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## A NEW ITERATIVE SCHEME FOR NONEXPANSIVE AND INVERSE STRONGLY MONOTONE MAPPINGS

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## Abstract

The aim of this paper is to introduce a new iterative scheme for finding a common element of the set of fixed points of a nonexpansive mapping and the set of solutions of a variational inequality problem for an  $\alpha$ -inverse-strongly-monotone mapping and then obtain a weak convergence theorem. Also we shall prove the validity of our result by taking a numerical example in C++. Using this result, we obtain a weak convergence theorem for a pair of a nonexpansive mapping and a strictly pseudocontractive mapping. Further, we consider the problem of finding a common element of the set of fixed points of a nonexpansive mapping and the set of zeros of an  $\alpha$ -inverse-strongly-monotone mapping.

Key Words : Fixed points, Inverse strongly monotone mappings, Nonexpansive mappings, Variational inequalities.

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