Dynamics of Continuous, Discrete and Impulsive Systems
Series **B:** *Applications & Algorithms* **21 (2014)** 163-184

STRONG CONVERGENCE THEOREMS BASED ON A NEW MODIFIED EXTRAGRADIENT METHODS FOR FINITE GENERALIZED KY FAN INEQUALITIES,VARIATIONAL INEQUALITY PROBLEMS AND FIXED POINT PROBLEMS

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Abstract. In this paper, we introduce a new iterative algorithm for finding a common element of the set of solutions of finite generalized Ky Fan inequalities and the set of solutions of more general variational inequality for finite relaxed cocoercive operators and the set of common fixed points of a nonexpansive semigroup in Hilbert space. The results obtained in this paper improve and extend the results announced by many others.

Keywords. Ky Fan inequality; Variational inequality; Fixed point; Nonexpansive semigroup; Hilbert space.

AMS (MOS) subject classification: 47H09, 47H10.

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Received March 2014; revised July 2014.

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