

A Shrinking Projection Method for Generalized Mixed Equilibrium Problems, Variational Inclusion Problems and a Finite Family of Quasi-Nonexpansive Mappings

Author(s): Kumam, W (Kumam, Wiyada)^{2,3}; Jaiboon, C (Jaiboon, Chaichana)¹; Kumam, P (Kumam, Poom)^{3,4}; Singta, A (Singta, Akarate)²

Source: JOURNAL OF INEQUALITIES AND APPLICATIONS **Article**

Number: 458247 **DOI:** 10.1155/2010/458247 **Published:** 2010

Abstract: The purpose of this paper is to consider a shrinking projection method for finding a common element of the set of solutions of generalized mixed equilibrium problems, the set of fixed points of a finite family of quasi-nonexpansive mappings, and the set of solutions of variational inclusion problems. Then, we prove a strong convergence theorem of the iterative sequence generated by the shrinking projection method under some suitable conditions in a real Hilbert space. Our results improve and extend recent results announced by Peng et al. (2008), Takahashi et al. (2008), S. Takahashi and W. Takahashi (2008), and many others.

Addresses:

1. Rajamangala Univ Technol Rattanakosin RMUTR, Dept Math, Fac Liberal Arts, Bangkok 10100, Thailand
2. Rajamangala Univ Technol Thanyaburi RMUTT, Fac Sci & Technol, Dept Math & Comp Sci, Thanyaburi, Pathumthani, Thailand
3. Ctr Excellence Math CHE, Bangkok 10140, Thailand
4. KMUTT, Fac Sci, Dept Math, Bangkok 10140, Thailand

แหล่งอ้างอิง Web of Science