

W-GPH-KKM THEOREMS IN PSEUDO H-SPACES AND THEIR APPLICATIONS

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Abstract. In this paper, some new W-GPH-KKM theorems are established in pseudo H-spaces without any linear and convex structure under much weaker assumptions, and next as their applications, some new coincidence theorems, maximal element theorems, and existence theorems of solutions to generalized equilibrium problems are proved in pseudo H-spaces. The results represented in this paper unify and extend some corresponding known results in the literature.

Key Words and Phrases: Pseudo H-space, W-GPH-KKM mapping, coincidence theorem, maximal element, generalized equilibrium problem, fixed point.

2010 Mathematics Subject Classification: 47H04, 47H10, 49J35, 49J53, 54H25.

Acknowledgments. The authors thank the referee for his or her many valuable suggestions and helpful comments which improve the exposition of the paper. This work was supported by the Planning Foundation for Humanities and Social Sciences of Ministry of Education of China (“Research on utilizing conflict of water resource and initial water right allocation in a river basin based on game theory”, no. 12YJAZH084), the Young & Middle-Aged Academic Learners Program of the “Qinglan project” of Jiangsu Providence and by the Natural Science Foundation of Jiangsu University of Technology.

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Received: December 22, 2012; Accepted: February 10, 2013.