Dedicated to Professor Yeol Je Cho on the occasion of his retirement

Hybrid Bregman projection methods for fixed point and equilibrium problems

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Abstract.

The purpose of this article is to investigate a projection algorithm for solving a fixed point problem of a closed multi-valued Bregman quasi-strict pseudocontraction and an equilibrium problem of a bifunction. Strong convergence of the projection algorithm is obtained without any compact assumption in a reflexive Banach space. As applications, monotone variational inequality problems are considered. Finally, a numerical simulation example is presented for demonstrating the feasibility and convergence of the algorithm proposed in main result.

Acknowledgements. The authors would like to express their sincere appreciation to the anonymous reviewers for their suggestions on improving the quality of the paper.

Z. M. Wang and A. R. Wei are supported by the National Natural Science Foundation of China (Grant No. 61573218, 61603227, and 11601348); P. Kumam was supported by the Theoretical and Computational Science (TaCS) Center under Computational and Applied Science for Smart Innovation Cluster (CLASSIC), Faculty of Science, KMUTT.

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Received: 25.09.2017; In revised form: 24.04.2018; Accepted: 15.07.2018

²⁰¹⁰ Mathematics Subject Classification. 47H05, 47H09, 47J20.

Key words and phrases. multi-valued mapping, equilibrium problem, variational inequality, Banach space, projection algorithm.

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