Dedicated to Prof. Hong-Kun Xu on the occasion of his 60th anniversary

Solving split generalized mixed equality equilibrium problems and split equality fixed point problems for nonexpansive-type maps

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ABSTRACT.

Let X be a 2-uniformly convex and uniformly smooth real Banach space. In this paper, an iterative algorithm of *Krasnosel'skii-type* is constructed and used to approximate a common solution of *split generalized mixed equality equilibrium problems* ($SGMEEP$) and *split equality fixed point problems* ($SEFPP$) for *quasi-ψ-nonexpansive maps*. A strong convergence theorem of the sequence generated by this algorithm is proved without imposing any compactness-type condition on either the operators or the space considered. The theorem proved improves and complements important recent results in the literature.

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