



Shahzad, N., Zegeye, H.

On Mann and Ishikawa iteration schemes for multi-valued maps in Banach spaces

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Abstract

We prove strong convergence theorems for the Ishikawa iteration scheme involving quasi-nonexpansive multi-valued maps. We also construct an iteration scheme which removes a restrictive condition in Song and Wang results [Y. Song, H. Wang, Erratum to "Mann and Ishikawa iterative processes for multivalued mappings in Banach spaces" [Comput. Math. Appl. 54 (2007) 872-877], Comput. Math. Appl. 55 (2008) 2999-3002]. Our results provide an affirmative answer to Panyanak's question [Mann and Ishikawa iterative processes for multivalued mappings in Banach spaces, Comput. Math. Appl., 54 (2007), 872-877], in a more general setting. © 2008 Elsevier Ltd. All rights reserved.

Author Keywords

Banach space; Fixed point; Nonexpansive multi-valued map; Quasi-nonexpansive multimap; Strong convergence

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