

Some pairs of multivalued operators

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ABSTRACT. We study the following problem.

Let (X, d) be a metric space and $T_1, T_2 : X \rightarrow P(X)$ two multivalued operators. Determine metric conditions on the pair of multivalued operators T_1 and T_2 , which imply that, for each $x \in X$, there exists a sequence of successive approximations for the pair (T_1, T_2) or for the pair (T_2, T_1) , starting from x , which converges to a common fixed point or to a common strict fixed point of T_1 and T_2 and, for each $x \in X$, there exists a sequence of successive approximations of T_i , starting from x , which converges to a fixed point or to a strict fixed point of T_i , for each $i \in \{1, 2\}$.

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