ON THE SUZUKI NONEXPANSIVE-TYPE MAPPINGS

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ABSTRACT. It is shown that if $C$ is a nonempty convex and weakly compact subset of a Banach space $X$ with $M(X) > 1$ and $T : C \to C$ satisfies condition $(C)$ or is continuous and satisfies condition $(C_{\lambda})$ for some $\lambda \in (0, 1)$, then $T$ has a fixed point. In particular, our theorem holds for uniformly nonsquare Banach spaces. A similar statement is proved for nearly uniformly noncreasy spaces.

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