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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_{λ}) 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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