N-ORDER UNIFORMLY NONCREASY BANACH LATTICES
AND THE SUZUKI NONEXPANSIVE-TYPE MAPPINGS

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Abstract. We show that if $K$ is a nonempty weakly compact convex subset of weakly orthogonal $N$-order uniformly noncreasy Banach lattice and $T : K \to K$ satisfies condition $(C)$ or is continuous and satisfies condition $(C_{\lambda})$ for some $\lambda \in (0, 1)$, then $T$ has a fixed point. This generalizes a result from [?].

Key Words and Phrases: Nonexpansive mapping, Fixed point, Weakly orthogonal lattice, Mapping satisfying condition $(C_{\lambda})$, N-order uniformly noncreasy Banach lattice.

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References


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