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ON SOME RESULTS OF KRASNOSELSKII THEOREM FOR WEAK TOPOLOGY IN BANACH SPACES

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Abstract. In this study, we aim to present some new versions of classical Schauder and Banach fixed point theorems under weak topology in general Banach spaces. We have also another main goal which is to prove that Krasnoselskii theorem ensures in general Banach spaces using these new results. As an application, an illustrative example providing such results is given. Our results extend known results on the issue.

Key Words and Phrases: Fixed point theorem, Krasnoselskii fixed point theorem, sequentially weakly continuous operator, weakly compact operator.

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