

LERAY-SCHAUDER ALTERNATIVES IN BANACH ALGEBRA INVOLVING THREE OPERATORS WITH APPLICATIONS

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Abstract. In this paper, we establish some nonlinear alternatives of Leray-Schauder type in Banach algebra satisfying certain sequential condition (\mathcal{P}) for the sum and the product of nonlinear weakly sequentially continuous operators and we give an example of application to a functional nonlinear integral equation.

Key Words and Phrases: Banach algebra, sequentially weakly continuous, fixed point theorems, relatively weakly compact, integral equations.

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