Fixed Point Theory, 22(2021), No. 1, 263-278
DOI: 10.24193/fpt-ro.2021.1.19
http://www.math.ubbcluj.ro/~nodeacj/sfptcj.html

MOMENTS SOLUTION OF FRACTIONAL EVOLUTION EQUATION FOUND BY NEW KRASNOSELSKII TYPE FIXED POINT THEOREMS

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Abstract. In this note, we establish the existence of solutions in the moment mode of a fractional evolution equation, as well as a fractional coupled system, obtained by new Krasnoselskii type fixed point and coupled fixed point theorems. We use new Krasnoselskii type contraction conditions in the sense of measure of noncompactness in Banach spaces. The new outcomes extend some special well known recent results.

Key Words and Phrases: Hybrid fixed point theorem, coupled fixed point theorem, measure of noncompactness, fractional differential equation, fractional calculus, fractional differential operator.
2020 Mathematics Subject Classification: 35K90, 47H10, 44A45.

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Received: June 7, 2018; Accepted: July 15, 2018.