

**EXISTENCE RESULTS FOR IMPULSIVE SEMILINEAR
FRACTIONAL DIFFERENTIAL INCLUSIONS
WITH DELAY IN BANACH SPACES**

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Abstract

In this paper, we introduce a new concept of mild solution of some class of semilinear fractional differential inclusions of order $0 < \alpha < 1$. Also we establish an existence result when the multivalued function has convex values. The result is obtained upon the nonlinear alternative of Leray-Schauder type.

Keywords: fractional calculus, caputo fractional derivative, multivalued map, differential inclusions, mild solution, fixed point.

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