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NEW RESULTS ON THE EXISTENCE OF SOLUTIONS FOR SYSTEMS OF HYBRID DIFFERENTIAL EQUATIONS WITH ν -CAPUTO FRACTIONAL DERIVATIVES

Communication Info

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Abstract

This work is devoted to the study of fractional hybrid differential equations involving ν -Caputo fractional derivatives of order $1 < \kappa \leq 2$. We establish an existence result for mild solutions under suitable nonlocal conditions in an appropriate Banach space framework. The analysis is carried out by employing fixed point techniques combined with tools from functional analysis. To illustrate the effectiveness of the theoretical results, an example is presented demonstrating the applicability of the developed approach.

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