

1056-35-2032

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In this paper we study the existence of mild solutions to nonautonomous fractional integrodifferential equations with nonlocal initial conditions:

$$\begin{cases} D^\alpha u(t) + A(t)u(t) = f(t, u(t)) + \int_0^t q(t-s)h(s, u(s))ds, & t > 0, \quad 0 < \alpha \leq 1, \\ u(0) + g(u) = u_0. \end{cases}$$

The approach relies on the use of compactness methods and fixed-point techniques. (Received September 23, 2009)