



**CONTROLLABILITY OF A FRACTIONAL TIME VARYING
DELAY NONLINEAR NETURAL DYNAMICAL SYSTEM**

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Abstract

This paper discusses the controllability of fractional for a class of time-varying delay nonlinear neutral systems. Firstly, the paper applied the Laplace transform, Laplace inverse transform, Convolution theorem and so on to give the solution expression for fractional control systems. Eventually constructed the Gramian matrix to give the sufficient and necessary conditions for the systems.

Keywords and phrases: controllability, time-varying, fractional, time-delay.

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