

Caputo Laplace Transform of Derivatives to Solve Fractional Order Differential Equation

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Abstract—*In this paper, we have solved some linear fractional differential equations with constant coefficient using Caputo Laplace Transform of derivatives . Fractional derivatives describe the property of memory and heredity of many materials, and it is the major advantage over integer-order derivatives. Fractional differential equations are differential equations of arbitrary (noninteger) order. Fractional differential equations have attracted considerable attention recently, due to its extensive applications in engineering and science;*

Keywords: *Caputo Fractional Derivatives, Laplace Transform, Fractional Calculus, Fractional Solutions, Fractional derivatives.*