Non-perturbative Approximate Solution of Fractional Riccati Type Equation

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A B S T R A C T

In the present paper a non-perturbative approximate analytic solution is derived for the fractional Riccati type equation by using Adomian Decomposition Method (ADM). The present method performs extremely well in terms of accuracy, efficiency and simplicity.

Keywords: ADM (Adomiann's Decomposition Method), Power Series Method, Riccati equation, non-Perturbative.