

Numerical Investigation Based on Wavelet Tau Method for Solving Distributed Order Fractional Differential Equation

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In this work, we propose a new approach based on Chebyshev wavelets for finding the approximate solution of distributed order fractional differential equations (one & two variable case). The operational matrix of distributed order of Chebyshev wavelets are constructed and utilized to reduce the fractional differential equation into the system of linear algebraic equations by combining Legendre Gauss quadrature formula & Tau method. Some test functions are included to show the usefulness of method.

References

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