

Closed-Form Wave Solutions for The Conformable Time-Fractional Ito Integro-Differential Equation

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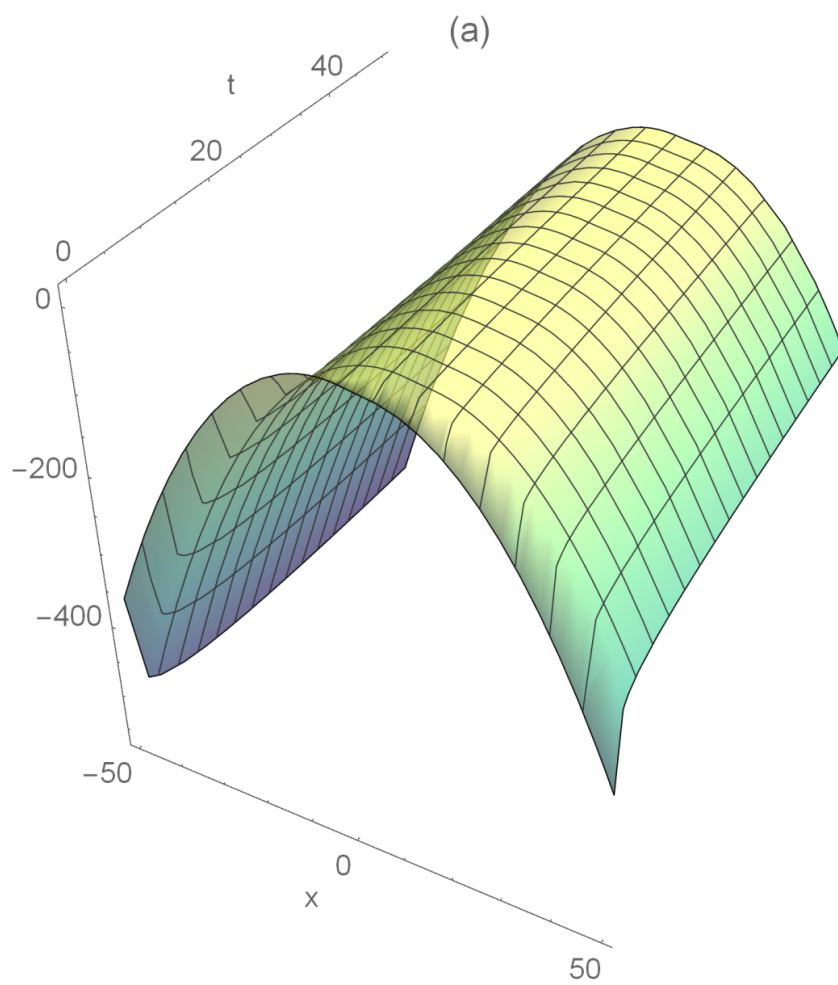
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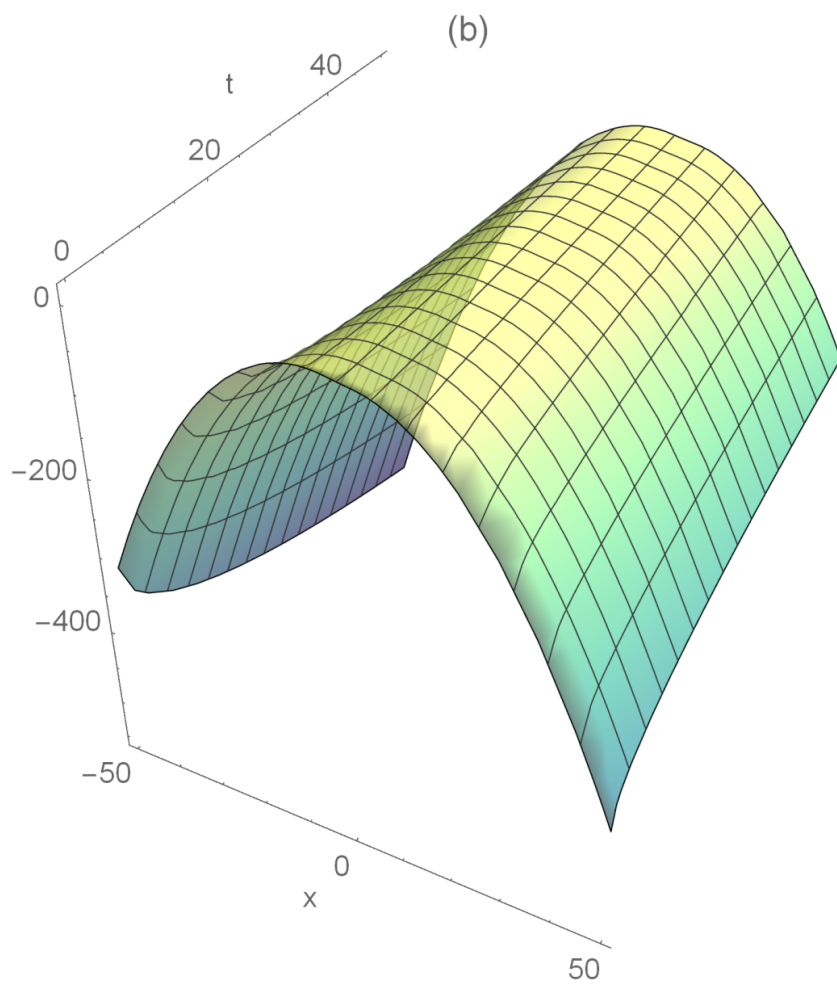
Abstract

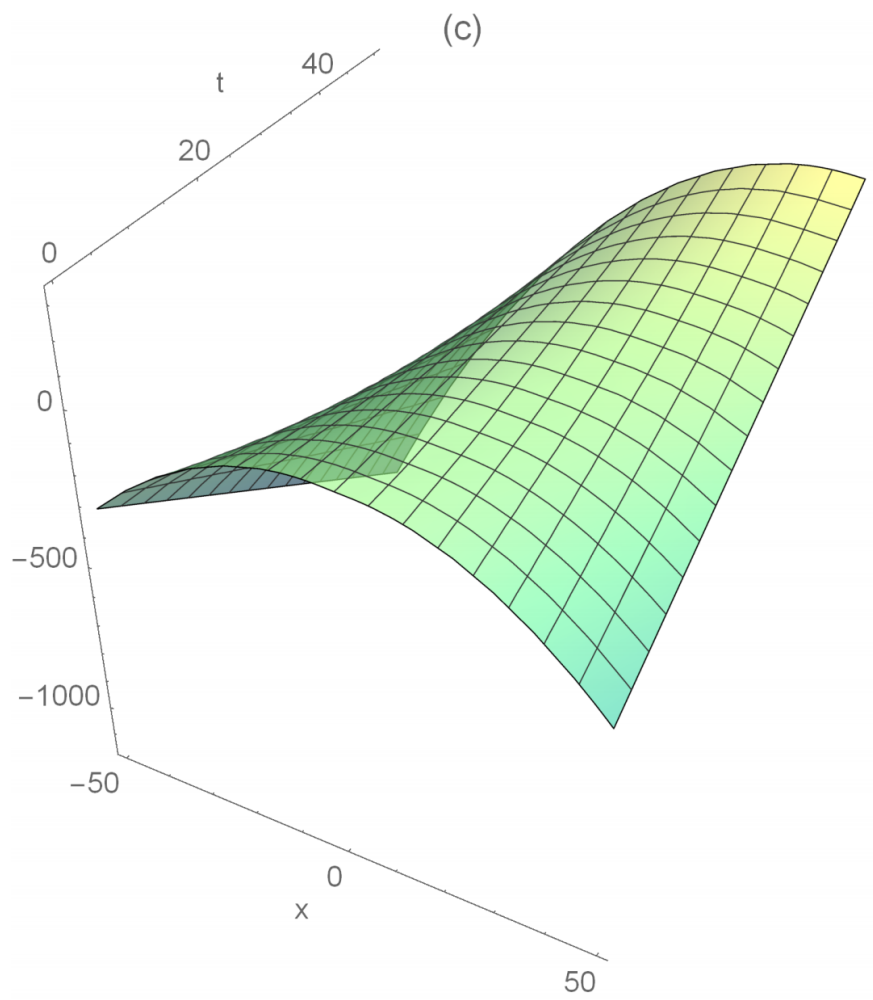
Several classes of exact analytic solutions for the time-fractional (2+1)-dimensional Ito equation are derived with the aid of Mathematica package. The Kudryashov simple equation method and its modified version are implemented to tackle the mentioned equation analytically. The obtained soliton solutions have been expressed by Logarithmic, Logarithmic-exponential, Logarithmic-periodic, and Logarithmic-hyperbolic functions with a set of free parameters. Graphical illustrations for some obtained solutions with special choices of free constants and various fractional orders are included. The two used methods provide the effectiveness, applicability, and convenient handling of the solution process for nonlinear evolution equations that appear in the various real life problems.

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