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TITLE: Fractional diffusion equation with double and triple Laplace Adomian decomposition methods

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ABSTRACT:
This paper aims to present an analytical and approximation method to get the solution of the space-time fractional diffusion equation. This suggested method is based on a combination of the double and triple Laplace transforms with the Adomain decomposition method. The presented methodology is tested on illustrative examples and the results show that it is a simple, efficient, and reliable method.

CONTRIBUTION OF THE APPLICANT:

- Literature review.
- Ideas involved.
- The mathematical model and its solution.
- Analysis of the results.
- Writing up the manuscript.

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