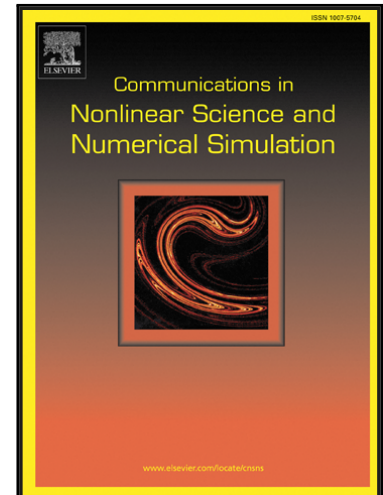


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Analytical solutions for multi-term time-space coupling fractional delay partial differential equations with mixed boundary conditions

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Highlights

- This paper provides the analytical solutions of coupling fractional delay partial differential equations with mixed boundary conditions on a finite domain.
- Integral transforms and method of reduction to integral equations are used to obtain the analytical solutions of multi-term time coupling delay fractional differential equations.
- The technique of spectral representation of the fractional Laplacian operator is used to convert the coupling fractional delay partial differential equations to the coupling multi-term time coupling fractional delay differential equations.
- By applying the obtained analytical solutions to the resulting multi-term time fractional delay differential equations, the desired analytical solutions of the coupling fractional delay partial differential equations are given.

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