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A time-space spectral tau method for the time fractional cable equation and its inverse problem

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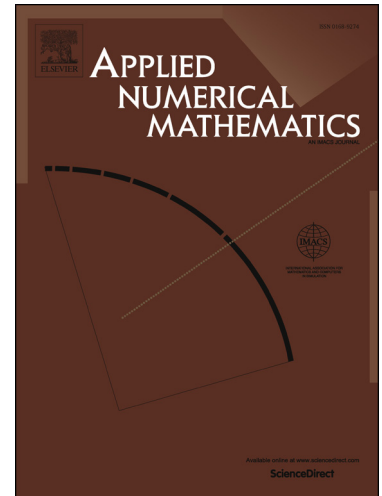
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Highlights

- A time-space spectral tau method for the time fractional cable equation is proposed.
- The approximation solution given by the spectral Legendre tau method is in excellent agreement with the exact solution.
- The nonlinear conjugate gradient method based on the spectral tau method to estimate the fractional derivative is established.

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