

On numerical solutions of the Schrödinger-hyperbolic equations

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Abstract: The nonlocal boundary value problem for Schrödinger-hyperbolic equation is considered. The stability estimates for the solution of the given problem is established. The first and second order of difference schemes are presented for approximately solving a specific nonlocal boundary problem. The theoretical statements for the solution of these difference schemes are supported by the result of numerical examples.

Keywords: Nonlocal boundary value problem, Difference scheme, Stability.

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