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A Numerical Solution of Wave Equation Arising in Non-Homogeneous Cylindrical Shells

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Abstract: A numerical solution of wave equation arising in non-homogeneous cylindrical shells\ is considered. Stable numerical schemes are developed. The stability estimates for the solution of these difference schemes and first and second order difference derivatives are presented. Applying the difference schemes, the numerical methods are proposed for solving the the given initial-boundary value problem.

Key Words: Hyperbolic equation; Difference schemes; Stability

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