

**On Numerical Solution of Multipoint NBVP
for Hyperbolic-Parabolic Equations with Neumann Condition**

A. Ashyralyev¹ and Y. Ozdemir²

¹Department of Mathematics, Fatih University, Istanbul, Turkey

²Department of Mathematics, Duzce University, Duzce, Turkey

Abstract

Certain problems of modern physics and technology can be effectively described in terms of nonlocal problem for partial differential equations. These nonlocal conditions arise mainly when the data on the boundary cannot be measured directly. Methods of solutions of nonlocal boundary value problems for partial differential equations and partial differential equations of mixed type have been studied extensively by many researchers in [1-5].

In this paper, numerical solutions of difference schemes of multipoint nonlocal boundary value problem for multidimensional hyperbolic-parabolic equation with Neumann condition are considered. The first and second orders of accuracy difference schemes are established. The theoretical statements for the solution of these difference schemes are supported by results of numerical experiments.

References

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