

A MULTIDIMENSIONAL VERSION OF THE FIRST DARBOUX
PROBLEM FOR A SECOND ORDER DEGENERATING
HYPERBOLIC EQUATION

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Abstract

A multidimensional version of the first Darboux problem for a second order degenerating hyperbolic equation is considered. Using the a priori estimations method the correct formulation of this problem in the Sobolev weighted space is proved.

Key words and phrases: Degenerating hyperbolic equation, multidimensional version of the first Darboux problem, Sobolev weighted space, a priori estimations.

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