On a Certain Hyperbolic Partial Differential Equation*

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Abstract

The main objective of this paper is to study the existence, uniqueness and other properties of solutions of a certain hyperbolic partial differential equation in two independent variables. The Banach fixed point theorem and a certain integral inequality with explicit estimate are used to establish the results.

Keywords and Phrases: Hyperbolic partial differential equation, Existence, uniqueness, Two independent variables, Banach fixed point theorem, Integral inequality, Explicit estimate, Boundedness, Continuous dependence.

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