

**Note on partial differential equations with non-constant coefficients and convolution method.**

ABSTRACT

In this study we extend the classification of partial differential equations to the further using the convolutions products. The purpose of this study is to compute the solutions of some explicit initial-boundary value problems for one-dimensional wave equation with variable coefficients by means of Laplace transform which in general has no solution.

**Keyword:** Sumudu transform; Differential equation; Non-constant coefficients; Convolution.