Hyperbolic equations by Mathematica

Marian Mureşan 02.11.2017

Abstract

The goal of the paper is to see the power of Mathematica for studying partial differential equations of hyperbolic type. A given code, even if it was developed by a gifted programmer, hardly can solve any such equation. In our paper we introduce some hyperbolic partial differential equations, study if they are solvable by closed-form formulas, if not we approach them by numerical means, and finally plot the results. Everything is carried out under the umbrella of *Mathematica*.