New Families of Nontravelling Wave Solutions to Two (3+1)-Dimensional Equations

BAI Cheng-Lin,[1] LIU Xi-Qiang,[2] and ZHAO Hong[1]

[1] School of Physics Science and Information Engineering, Liaocheng University, Liaocheng 252059, China
[2] School of Mathematics Science, Liaocheng University, Liaocheng 252059, China
(Received: 2004-6-24; Revised:)

Abstract: In this paper, two (3+1)-dimensional equations are investigated. Auto-Bäcklund transformation is obtained, which is used with some ansatze to seek new types of exact solutions including some arbitrary functions. When these arbitrary functions are taken as some special functions, these solutions possess abundant structures. These solutions contain soliton-like solutions and rational solutions.

[Full text: PDF]

Close