Formulas to Solve the (2+1)-Dimensional System: The (2+1)-Extension of Classical Boussinesq System

 TIAN Yong-Bo, CHENG Yi and TIAN Chou

Department of Mathematics, University of Science and Technology of China, Hefei 230026, China
(Received: 2000-1-17; Revised: 2000-3-24)

Abstract: We deal with the (2+1)-extension of classical Boussinesq system, which can reduce to several meaningful (1+1)-dimensional systems. By studying its Lax pair, we put forward invariances of Lax pair at first, then a recursion formula depending on an arbitrary function is derived. At last, some solutions of the (2+1)-extension of classical Boussinesq system are digged out by using the formula.

[Full text: PDF]

Close