2005 Vol. 44 No. 5 pp. 802-806 DOI:

New Soliton-like Solutions and Multi-soliton Structures forBroer-Kaup System with Variable Coefficients

JI Ming-Jun¹ and LÜ Zhuo-Sheng²

¹ Transportation Management College, Dalian Maritime University, Dalian 116026, China

Abstract: By using the further extended tanh method [Phys. Lett. A 307 (2003) 269; Chaos, Solitons and Fractals 17 (2003) 669] to the Broer-Kaup system with variable coefficients, abundant new soliton-like solutions and multi-soliton-like solutions are derived. Based on the derived multi-soliton-like solutions which contain arbitrary functions, some interesting multi-soliton structures are revealed.

PACS: 02.03.Jr, 05.45.Yv

Key words: further extended tanh method, soliton-like solution

[Full text: PDF]

Close

 $^{^2}$ Key Laboratory of Mathematics Mechanization, Academy of Mathematics and Systems Science, the Chinese Academy of Sciences, Beijing 100080, China (Received: 2005-3-14; Revised:)