2003 Vol.39 No.2 pp.167-172 DOI:

# Envelope Periodic Solutions to Coupled Nonlinear Equations

LIU Shi-Da,[1,2] FU Zun-Tao,[1,2] LIU Shi-Kuo,[1] and ZHAO Qiang[1]

[1] School of Physics, Peking University, Beijing 100871, China
[2] State Key Laboratory for Turbulence and Complex Systems, Department of Mechanics and Engineering Science, Peking University, Beijing 100871, China
(Received: 2002-6-10; Revised: )

Abstract: The envelope periodic solutions to some nonlinear coupled equations are obtained by means of the Jacobi elliptic function expansion method. And these envelope periodic solutions obtained by this method can degenerate to the envelope shock wave solutions and/or the envelope solitary wave solutions.

PACS: 04.20.Jb
Key words: Jacobi elliptic function, nonlinear coupled equations, envelope periodic solution

[Full text: PDF]

Close