

He, Ji-Huan

Variational approach to $(2 + 1)$ -dimensional dispersive long water equations. (English)

Zbl 1123.37319

Phys. Lett., A 335, No. 2-3, 182-184 (2005).

Summary: A variational model is established for $(2 + 1)$ -dimensional Broer-Kaup equations by the semi-inverse method [Int. J. Turbo Jet-Engines 14, No. 1, 23 (1997)].

MSC:

37K10 Completely integrable infinite-dimensional Hamiltonian and Lagrangian systems, integration methods, integrability tests, integrable hierarchies (KdV, KP, Toda, etc.)

Cited in **32** Documents

37N10 Dynamical systems in fluid mechanics, oceanography and meteorology

Keywords:

variational methods; Broer-Kaup equation

Full Text: [DOI](#)

References:

- [1] Xia, T.C.; Chen, D.Y., Chaos solitons fractals, 22, 577, (2004)
- [2] Ablowitz, M.J.; Clarkson, P.A., Soliton, nonlinear evolution equations and inverse scattering, (1991), Cambridge Univ. Press New York · Zbl 0762.35001
- [3] Wadati, M., J. phys. soc. jpn., 38, 673, (1975)
- [4] Matveev, V.B.; Salle, M.A., Darboux transformation and soliton, (1991), Springer Berlin · Zbl 0744.35045
- [5] De-Sheng, L.; Feng, G.; Hong-Qing, Z., Chaos solitons fractals, 20, 1021, (2004)
- [6] Mei, J.-Q.; Li, D.-S.; Zhang, H.-Q., Chaos solitons fractals, 22, 669, (2004)
- [7] Chen, Y.; Wang, Q.; Li, B., Chaos solitons fractals, 22, 675, (2004)
- [8] Geng, X.; Cao, C., Chaos solitons fractals, 22, 683, (2004)
- [9] Delgado, J.; Nunez-Yepe, H.N.; Salas-Brito, A.L., Chaos solitons fractals, 20, 925, (2004)
- [10] Wan, Y.Q.; Guo, Q.; Pan, N., Int. J. nonlinear sci. numer. simulation, 5, 5, (2004)
- [11] Liu, H.M., Int. J. nonlinear sci. numer. simulation, 5, 95, (2004)
- [12] Hao, T.H., Int. J. nonlinear sci. numer. simulation, 4, 307, (2003)
- [13] Hao, T.H., Int. J. nonlinear sci. numer. simulation, 4, 311, (2003)
- [14] He, J.H., Int. J. enrg. sci., 39, 3, 323, (2000)
- [15] Zhang, J., Int. J. nonlinear sci. numer. simulation, 5, 1, 37, (2004)
- [16] He, J.H., Int. J. turbo jet-engines, 14, 1, 23, (1997)
- [17] He, J.H., Int. J. nonlinear sci. numer. simulation, 2, 4, 309, (2001)
- [18] He, J.H., Chaos solitons fractals, 19, 847, (2004)
- [19] He, J.H., Comput. struct., 81, 2079, (2003)
- [20] Meletlidou, E.; Pouget, J.; Maugin, G.; Aifantis, E., Chaos solitons fractals, 22, 613, (2004)

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.