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Cnoidal wave solutions to Boussinesq systems. (English) Zbl 1122.35106

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MSC:

35Q35 PDEs in connection with fluid mechanics

37K20 Relations of infinite-dimensional Hamiltonian and Lagrangian dynamical systems with algebraic geometry, complex analysis, and special functions

34L30 Nonlinear ordinary differential operators

35Q51 Soliton equations

35S15 Boundary value problems for PDEs with pseudodifferential operators

76B03 Existence, uniqueness, and regularity theory for incompressible inviscid fluids

76B15 Water waves, gravity waves; dispersion and scattering, nonlinear interaction

76B25 Solitary waves for incompressible inviscid fluids

Cited in **9** Documents

Keywords:

existence of periodic travelling-wave solutions; explicit solutions; Jacobi elliptic function; stability

Full Text: [DOI](#)