

Variational Principles for Some Nonlinear Wave Equations

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Using the semi-inverse method proposed by Ji-Huan He, variational principles are established for some nonlinear wave equations arising in physics, including the Pochhammer-Chree equation, Zakharov-Kuznetsov equation, Korteweg-de Vries equation, Zhiber-Shabat equation, Kawahara equation, and Boussinesq equation.

Key words: Variational Theory; Semi-Inverse Method; Nonlinear Equation.

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