

Nonlinear Sciences > Exactly Solvable and Integrable Systems

Lie symmetry analysis and exact solutions for a variable coefficient Gardner equation arising in arterial mechanics

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In this paper, a variable-coefficient Gardner equation is considered. By using the classical symmetry analysis method symmetries for this equation are obtained. Then, the generalized Jacobi elliptic function expansion method is used to solve the reduced ODE. Some new exact solutions for the considered PDE are obtained.

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