

New Complexiton Solutions of (2+1)-Dimensional Nizhnik-Novikov-Veselov Equations

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Abstract: In this paper, we extend the multiple Riccati equations rational expansion method by introducing a new ansatz. Using this method, many complexiton solutions of the (2+1)-dimensional Nizhnik-Novikov-Veselov equations are obtained which include various combination of hyperbolic and trigonometric periodic function solutions, various combination of hyperbolic and rational function solutions, various combination of trigonometric periodic and rational function solutions, etc. The method can be also used to solve other nonlinear partial differential equations.

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Key words: rational expansion method, (2+1)-dimensional Nizhnik-Novikov-Veselov equations, complexiton solutions

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