

Multisoliton Solutions of the (3+1)-Dimensional Nizhnik-Novikov-Veselov Equation

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Abstract: Using the standard truncated Painlevé analysis, we can obtain a Bäcklund transformation of the (3+1)-dimensional Nizhnik-Novikov-Veselov (NNV) equation and get some (3+1)-dimensional single-, two- and three-soliton solutions and some new types of multisoliton solutions of the (3+1)-dimensional NNV system from the Bäcklund transformation and the trivial vacuum solution.

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Key words: soliton solutions, high-dimensional model

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