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Abundant Multisoliton Structure of (3+1)-Dimensional Breaking Soliton Equation

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Abstract: Using the extended homogeneous balance method, we obtained abundant exact solution structures of the (3+1)-dimensional breaking soliton equation. By means of the leading order term analysis, the nonlinear transformations of the (3+1)-dimensional breaking soliton equation are given first, and then some special types of single solitary wave solutions and the multisoliton solutions are constructed.

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Key words: extended homogeneous balance method, breaking soliton equation, soliton

solutions

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