

Lie Algebraic Structures and Integrability of Long-Short Wave Equation in (2+1) Dimensions

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Abstract: The hidden symmetry and integrability of the long-short wave equation in (2+1) dimensions are considered using the prolongation approach. The internal algebraic structures and their linear spectra are derived in detail which show that the equation is integrable.

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Key words: prolongation approach, hidden symmetry, integrability

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