

Quasi-periodic and Non-periodic Waves in (2+1)-Dimensional Nonlinear Systems

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Abstract: New exact quasi-periodic and non-periodic solutions for the (2+1)-dimensional nonlinear systems are studied by means of the multi-linear variable separation approach (MLVSA) and the Jacobi elliptic functions with the space-time-dependent modulus. Though the result is valid for all the MLVSA solvable models, it is explicitly shown for the long-wave and short-wave interaction model.

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Key words: quasi-periodic waves, non-periodic waves, multi-linear variable separation approach, the long-wave and short-wave interaction model

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