

Symmetry and Similarity Solutions of a (2+1)-Dimensional Generalized Broer-Kaup System

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Abstract: We study the symmetries of a (2+1)-dimensional generalized Broer-Kaup system by means of the classical Lie group theory. The corresponding group algebra is constructed. Based on the symmetries, several types of similarity solutions are obtained.

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Key words: (2+1)-dimensional GBK system, classical Lie group approach, symmetry, similarity solution

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