

## New Exact Solutions of Broer-Kaup Equations

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Abstract: By a known transformation, (2+1)-dimensional Broer-Kaup equations are turned to a single equation. The classical Lie symmetry analysis and similarity reductions are performed for this single equation. From some of reduction equations, new exact solutions are obtained, which contain previous results, and more exact solutions can be created directly by abundant known solutions of the Burgers equations and the heat equations.

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Key words: Broer-Kaup equations, similarity reductions, exact solution

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