

# The Fission, Fusion and Annihilation of Solitons of the (2+1)-Dimensional Broer-Kaup-Kupershmidt System

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By means of an improved mapping approach, a series of excitations of the (2+1)-dimensional Broer-Kaup-Kupershmidt (BKK) system is derived. Based on the derived solitary wave excitation, some specific fission, fusion and annihilation phenomena of solitons are also obtained. — PACS numbers: 05.45.Yv, 03.65.Ge.

*Key words:* Improved Mapping Approach; BKK System; Fission; Fusion; Annihilation.