

# New Variable Separation Excitations of a (2+1)-dimensional Broer-Kaup-Kupershmidt System Obtained by an Extended Mapping Approach

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Using an extended mapping approach, a new type of variable separation excitation with two arbitrary functions of the (2+1)-dimensional Broer-Kaup-Kupershmidt system (BKK) is derived. Based on this excitation, abundant propagating and non-propagating solitons, such as dromions, rings, peakons, compactons, etc. are found by selecting appropriate functions. – PACS: 05.45.Yv, 03.65.Ge

*Key words:* Extended Mapping Approach; (2+1)-Dimensional BKK System; Localized Excitation.