

Compacton and Foldon Excitations in the Generalized (2+1)-dimensional Nizhnik-Novikov-Veselov Equation

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Using the variable separation approach, abundant localized coherent solutions are obtained for the generalized (2+1)-dimensional Nizhnik-Novikov-Veselov (GNNV) equation. Two special types of localized excitations, compactons and foldons, are discussed. The behavior of the interactions for three-compacton solutions and two foldon solutions are investigated, and many interesting interaction properties are revealed. – PACS number: 02.30.Jr, 03.40.Kf, 03.65.Ge, 05.45.Yv, 03.65.-w

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