Bell-Like and Peak-Like Loop Solitons in (2+1)-Dimensional Dispersive Long Water-Wave System

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Z. Naturforsch. **61a**, 39 – 44 (2006); received November 11, 2005

Starting from an extended mapping approach, a new type of variable separation solution with arbitrary functions of the (2+1)-dimensional dispersive long water-wave (DLW) system is derived. Then based on the derived solution, we reveal some new types of loop solitons such as bell-like loop solitons and peak-like loop solitons in the (2+1)-dimensional DLW system. – PACS numbers: 05.45.Yv, 03.65.Ge

Key words: Extended Mapping Approach; Dispersive Long Water-Wave System (DLW); Bell-Like Loop Solitons; Peak-Like Loop Solitons.