



PAINLEVÉ ANALYSIS AND NEW COMPLEXITON SOLUTIONS FOR THE GENERALIZED HIROTA-SATSUMA COUPLED KdV EQUATION

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Abstract

Painlevé integrability of the generalized Hirota-Satsuma coupled KdV equation is proved directly by the standard WTC method. New complexiton solutions are given out by Darboux transformation with the constant seed solution for the Hirota-Satsuma coupled KdV equation.

Keywords and phrases: complexiton, Hirota-Satsuma coupled KdV equation, Painlevé analysis.

