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Asymptotic Behavior of Soliton Solutions with a Double Spectral Parameter for Principal Chiral Field

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Abstract: The soliton solutions with a double spectral parameter for the principal chiral field are derived by Darboux transformation. The asymptotic behavior of the solutions as time tends to infinity is obtained and the speeds of the peaks in the asymptotic solutions are not constants.

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Key words: principal chiral field, asymptotic solutions

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