

Direct Approach to Study of Soliton Perturbations of Defocusing Nonlinear Schrödinger Equation

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(Received: 2004-1-13; Revised: 2004-4-28)

Abstract: A direct approach in the study of soliton perturbations has been developed, based on the method of separation of variables in our previous papers. In this paper we use it to deal with the nonlinear Schrödinger equation under the action of perturbations. Our results differ from those obtained in previous work.

PACS: 42.65.Tg, 42.81.Dp, 05.45.Yv

Key words: direct approach, soliton, perturbation

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