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Bell and kink type soliton solutions in birefringent nano-fibers

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Abstract

In this paper we have obtained the explicit Jacobian elliptic periodic traveling wave solutions in birefringent fibers with spatio-temporal dispersion with the help of F -expansion method. Two nonlinear media are used that are Kerr and Parabolic law. There are constraint conditions that evolve with the solution structure.

Key words: Birefringent, Optical solitons, F -expansion Method

1 Introduction

Optical solitons is an emerging field of nonlinear optics. Solitons have brought a new revolution in the field of Physics and Mathematics. Many

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