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Geometrical features of the soliton solution

Abstract

It is well known, that integrable equations are solvable by the inverse scattering method [1]. Investigating of the integrable spin equations in (1+1), (2+1) dimensions are topical both from the mathematical and physical points of view. Integrable equations admit different kinds of physically interesting solutions as solitons, vortices, dromions etc. We consider an integrable spin M-I equation [2]. There is a corresponding Lax representation. And the equation allows an infinite number of integrals of motion. We construct a surface corresponding to soliton solution of the equation. Further, we investigate some geometrical features of the surface.

Bibliography

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