Integrable Hamiltonian Hierarchies [Spectral and Geometric Methods /

Gerdjikov, V.S.

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Physics | Global analysis (Mathematics) | Geometry | Mathematical physics | Physics | Mathematical Methods in Physics | Analysis | Mathematical and Computational Physics | Geometry | Physics, general

Monografía

This book presents a detailed derivation of the spectral properties of the Recursion Operators allowing one to derive all the fundamental properties of the soliton equations and to study their Hamiltonian hierarchies. Thus it is demonstrated that the inverse scattering method for solving soliton equations is a nonlinear generalization of the Fourier transform.The book brings together the spectral and the geometric approaches and as such will be useful to a wide readership: from researchers in the field of nonlinear completely integrable evolution equations to graduate and post-graduate students

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