

Original Articles

孤子方程谱系的可积性和参数表示

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摘要 该文讨论了平稳孤子方程有限带状解的参数表示.该参数表示可表示为Hamilton系统.在Liouville情形是可积的.此外还得到非共焦对合积分表示 $\{F_m\}$.孤子方程的有限带状解可表示为常微分方程的两个解集.

关键词 [孤子方程](#) [Liouville可积](#) [有限带状解](#)

分类号

The integrability and parametric representation of a hierarchy of soliton equations

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Abstract The parametric representation for finite-band solutions of a stationary soliton equation is discussed. This parametric representation can be represented as a Hamiltonian system which is integrable in Liouville sense. The nonconfocal involutive integral representations $\{F_m\}$ are obtained also. The finite-band solutions of the soliton equation can be represented as the solutions of two set of ordinary differential equations.

Key words [Solton epuation](#) [Hamiltonian system](#) [Liouwill integrable](#)

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