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Integrable dynamics of Toda type on square and triangular lattices

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Abstract

Toda lattice is one of the most famous two-dimensional difference-differential integrable equations. There are a few extensions of the Toda lattice to three-dimensional integrable systems. We will review these extensions and compare them with the recent results on the subject (see [1] and [2]).

References:

- [1] P. M. Santini, M. Nieszporski, and A. Doliwa, Integrable generalization of the Toda law to the square lattice, *Phys. Rev. E* **70**, 056615 (2004)
- [2] P. M. Santini, A. Doliwa, and M. Nieszporski, Integrable dynamics of Toda type on square and triangular lattices, *Phys. Rev. E* **77**, 056601 (2008)