Classical and Quantum Mechanical Systems of Toda-Lattice Type

II. Solutions of the Classical Flows

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Abstract. Solutions to the classical periodic and non-periodic Toda lattice type Hamiltonian systems are expressed in terms of an Iwasawa-type factorization of a "large" Lie group. The scattering of these systems is determined in the non-periodic case. For the generalized periodic Toda lattices a generalization of Kostant's formula is obtained using standard representations of affine Lie groups.

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