

CALCULATION OF THE ENERGY SPECTRUM  
OF THE QUANTUM PERIODIC  
THREE-PARTICLE TODA  
LATTICE

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S u m m a r y

The quantum periodic three-particle Toda lattice is considered. For its Hamiltonian, the energy spectrum is calculated in terms of the orthogonal basis in Cartesian coordinates. The eigenstates are classified according to the irreducible representations of the  $C_{3v}$ -point group. The spectral statistical properties are analyzed and shown to demonstrate a fairly good agreement with the theoretical predictions for the integrable system.