Contribution Title:	NEKHOROSHEV THEOREM FOR THE PERIODIC TODA LATTICE
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We consider the periodic Toda lattice with N particles, which is globally symplectomorphic to a 2-parameter family of $N-1$ coupled harmonic oscillators, and the action variables fill out the whole positive quadrant of $\mathbb{R}^{N-1}$. We prove that in the interior of the positive quadrant and a neighborhood of the origin, the Hamiltonian is strictly convex in the action variables, and therefore the Nekhoroshev theorem on perturbed integrable systems applies on almost all of the phase space. The main technical tool is a version of a theorem by Krichever concerning the period map of certain Abelian differentials on a Riemann surface associated to the phase space of the system.