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# Breathers as metastable states for weakly damped lattices of Hamiltonian oscillators

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We discuss the flow of energy in a lattice of Hamiltonian oscillators with weak damping at one end of the lattice. We derive bounds on the rate of dissipation when the initial energy in the lattice is localized in a spatially distant part of the lattice. For a special model, we exhibit a family of breather solutions for the undamped problem and show that the rate of energy dissipation can be explained by a very slow drift along this family of breathers.

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