Dissipation of classical energy in nonlinear quantum systems
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ICAL CHEMISTRY TEAM — Time dependence of energy transfer from classical
to quantum reservoir in nonlinear system is considered. Classical energy is under-
stood as the part of system energy that is expressible through average values of
coordinates and momenta. Dissipation of classical energy is studied in exactly solv-
able Jaynes-Cummings model. This process is also investigated using numerical and
approximate analytical approaches in a simple nonlinear oscillator model.

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