

Kapitza Averaging Procedure at Fixed Points of Nonlinear Oscillator

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Abstract. We demonstrate the sufficient changing in behavior for the nonlinear oscillator under the application of averaging Kapitza procedure (not necessary in its standard Hamiltonian formulation). The phase trajectories of the averaged system doesn't reflect the authentic features in fixed point neighborhoods to compare with non-averaged dynamical system.

Key words : Open-loop control, Kapitza averaging.
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