

Perturbation theory for systems with multiple stationary regimes

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I will consider deterministic and stochastic perturbations of dynamical systems and stochastic processes with multiple invariant measures. Long-time evolution of the perturbed system will be described as a motion on the cone of the invariant measures of the non-perturbed system.

Quasilinear parabolic equations with a small parameter in the higher derivatives [FK10], perturbations of non-linear oscillators [FWen12b], [BF00], and of the Landau-Lifshitz equation for magnetization [FH12], linear elliptic PDE's with a small parameter [FW12b], [FWeb04], [FW12] will be considered as examples.

References

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