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Title: *“Normal forms with negligible small divisors for a class of non-autonomous Hamiltonians”*

Abstract. The aim of the talk is to illustrate the ideas behind the theory of normal forms for nearly-integrable non-autonomous Hamiltonian systems with a real-analytic perturbation which is summable in time. It will be shown how, in the paradigmatic case of time decaying perturbations, the small divisors do not affect the well-posedness of the (ad-hoc) perturbative scheme and its “quantitative” arguments. The perpetual stability for the class of systems at hand, is obtained as a corollary of the normal form result.

From a joint work with S. Wiggins.