Seminario di Analisi Matematica

Venerdì 25 febbraio 2022, ore 14:45
Dipartimento di Matematica e Fisica
Aula 211, Palazzina C, L.go S.L. Murialdo 1

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Generic double exponential stability of invariant Lagrangian tori in Hamiltonian systems, application to KAM theory. Part 2

Abstract

We continue the presentation of a work with Abed Bounemoura and Bassam Fayad where we prove that generically, both in a topological and measure-theoretical sense, an invariant Lagrangian Diophantine torus of a Hamiltonian system is doubly exponentially stable in the sense that nearby solutions remain close to the torus for an interval of time which is doubly exponentially large with respect to the inverse of the distance to the torus.

Elements of the proof will be exposed.