и ее приложений

Семинар состоится в пятницу 13 апреля 2018 года.

Начало в 17:00.

Семинар будет проходить по адресу: ул. Усачева, д.6, аудитория 306

На семинаре выступит

Ignasi Mundet i Riera



(Barcelona) с докладом:

Finite subgroups of Ham and Symp

Abstract: Let X be a compact symplectic manifold and let Symp(X) (resp. Ham(X)) denote the group of symplectomorphisms (resp. hamiltonian diffeomorphisms) of X. I will talk about the following results:

Theorem 1: Ham (X) is Jordan. More precisely, there exists a constant C (depending only on the topology of X) such that any finite subgroup G of Ham(X) has an abelian subgroup whose index in G is at most C.

Theorem 2: if b 1(X)=0 then Theorem 1 holds true replacing Ham(X) by Symp(X).

Theorem 3: for general X, Theorem 1 holds true replacing Ham(X) by Symp(X) and "abelian" by "abelian or 2-step nilpotent".

In the first part of the seminar I will explain the context of these results. In particular, I will talk on the Jordan property for diffeomorphism groups, putting emphasis on situations where these theorems imply that the finite transformation groups in the symplectic category are much more restricted than in the smooth category. In the second part of the seminar I will explain the main ideas in the proofs of the theorems.