COLLOQUIUM DI DIPARTIMENTO

Martedì 7 marzo 2017
ore 14.30 Aula ‘Roberta Dal Passo’

La Prof.ssa Susanna Terracini (Università di Torino) terrà un seminario dal titolo:

A survey on the variational approach to the N-body problem

Abstract: In its full generality, the N-body problem of Celestial Mechanics has challenged many generation of mathematicians. It is commonly accepted, since the early works by H. Poincaré, that the periodic problem, through its associated action spectrum, carries precious information on the whole dynamics of a Hamiltonian system. Therefore, the problem of the existence and the qualitative properties of periodic and other selected trajectories for the N-body problem (from the classical celestial mechanics point of view to more recent advances in molecular and quantum models) has been extensively studied over the decades, and, more recently, new tools and approaches have given a significant boost to the field. We shall review some old an new results on the existence and classification of selected trajectories of the classical N-body problem, with an emphasis on new analytical and geometrical techniques.

Al termine del Colloquium seguirà un piccolo rinfresco in Sala Comune