ANNUNCIO SEMINARIO

"Jacobi stability analysis of restricted circular three body problem"

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06/05/2024 ore 11:00
Aula Seminari ex Dipartimento di Matematica

abstract

The restricted circular three body problem considers the motion of an infinitesimal particle due to the gravitational attraction of two massive primaries moving on circular orbits about one another. It is a very useful model for the investigation of the behaviour of real astronomical objects in the Solar System. In such a system there are five Lagrange equilibrium points, and one important characteristics of the motion is the existence of stable equilibria at the two points that form equilateral triangles with the primaries in the plane of the primaries' orbit. We analyse the stability of the equations of motion in the restricted three body problem by using the Jacobi stability analysis, the Kosambi-Cartan-Chern (KCC) theory, a differential geometric theory of the variational equations for the deviation of the whole trajectory to nearby ones.

Tutte le persone interessate sono invitate al seminari

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