

Stability of equilibria in Hamiltonian systems

Hildeberto Eulalio Cabral

Programa de Pós-graduação DM-UFPE

PVNS - UFS

After general considerations on stability of equilibria in Hamiltonian systems we talk about two specific problems. One is about relative equilibria of a satellite moving on a weakly elliptic periodic orbit around a Newtonian center of attraction, the other concerns equilibria in Robe's three-body problem, where one of the two primaries is a solid spherical shell filled with a homogeneous fluid and the infinitesimal particle is a small sphere immersed in the fluid.