

Abstract

In this talk, I will discuss tools from Symplectic Dynamics that can be used to answer some questions in the spatial isosceles three-body problem. The main results are related to periodic orbits, global surfaces of section, and, more generally, transverse foliations. We focus on the dynamics of energy surfaces and explain how those objects change as the energy increases. The main results are joint with Xijun Hu (Shandong University), Lei Liu (Shandong University), Yuwei Ou (Shandong University) and Guowei Yu (Nankai University).