

Abstract

In this talk, we will discuss the periodic orbits of zero-mass body in the circular planar restricted three-body problem. This problem has a rich history, yet many unanswered questions still remain. In this talk, we will review the results of Poincare and Birkhoff on two special cases of the restricted three-body problem. After that, we will discuss some recent results on the symplectic geometry. Some of the results are based on an ongoing research which is joint with Professor Otto van Koert.