Stellar Motions in Galactic Satellites

Juan C. Muzzio¹

¹La Plata Observatory, 1900 La Plata, Argentina. E-mail: jcmuzzio@fcaglp.fcaglp.unlp.edu.ar

The study of the motions of the stars that belong to a galactic satellite (i.e., a globular cluster or a dwarf galaxy orbiting a larger one) has some similarities, as well as significant differences, with the restricted three-body problem of celestial mechanics. The high percentage of chaotic orbits present in some models is of particular interest because it rises, on the one hand, the question of its origin and, on the other hand, the question of whether an equilibrium stellar system can be built when the bulk of the stellar motions are chaotic.