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They showed the corresponding periodic orbits under different energy constants, mass ratios, and oblateness factors of the two primaries. Based on photogravitational planar RTBP with oblateness, Pathak et al. [13] studied the seventh-, ninth-, and eleventh-order internal resonance periodic orbits of the Sun-Earth system by using Rungeâ€“Kuttaâ€“Gill method. For a generalized photogravitational RTBP model, the two primaries are oblate spheroid and are under the gravity of an asteroid belt.Â E. I. Abouelmagd and J. L. G. Guirao, â€œPeriodic and secular solutions in the restricted three-body problem under the effect of zonal harmonic parameters,â€ Applied Mathematics & Information Sciences, vol. 9, no. 4, pp. 1659â€“1669, 2015. View at: Google Scholar. This is a class of Hamiltonian dynamical systems that describes the dynamics of an electron in an external electric and magnetic field, and includes many systems from celestial mechanics. Based on Arnold's J^+-invariant, we introduce invariants of periodic orbits in planar Stark-Zeeman systems and study their behaviour. Notes. 36 Pages, 16 Figures. The restricted three-body problem has five equilibrium points, called Lagrangian or Libration Points. These points are the points of zero velocities and the objects placed in these points remains stable.Â The analytical approximation of three dimensional, periodic orbits about collinear points is performed. The equations of motion are developed from a Lagrangian approach described in Richardson [2]. The analytical approximation solution for the equations of motion is calculated through computer-based program.Â . Here the oblateness is neglected so and q1 and q2 are the radiation pressure terms of larger and smaller primary, Î¼ = m 2 m 1 + m 2. where m1 and m2 are masses of larger and smaller primary respectively. Keywords: Quasi-Periodic Orbit, Quasi-Halo, Lissajous Orbit, Restricted Three-Body Problem, PoincarÃ© Section PACS: 95.55.Pe. INTRODUCTION.Â which depend on series expansions, are very slow because an exponential increase in the number of coefcients is needed for every additional increase in the order of expansion. The speed problem can be overcome to a great extent by programming a symbolic manipulator for the problem of interest, but this leads to a signicant increase in programming time. More importantly, some of these techniques have instability problems near resonances. This led us to consider fully numeric methods.