Out-of-plane equilibria in the photo-gravitational four body problem

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SUMMARY

A three dimensional case of the restricted four-body problem with radiation pressure is considered. The three primaries are supposed to be in a collinear central configuration where both masses and both radiation forces of peripheral bodies are equal. In addition to the analysis of the equilibria in the planar problem introduced in a previous paper by the authors ([1]), we present here a complete study of position and stability of the equilibrium points out of Oxy plane.

Keywords: Equilibrium points, Stability, Restricted four-body problem, Radiation pressure, Bifurcations

AMS Classification: -

References

[1] Arribas, M; Abad, A.; Elipe, A. and Palacios, M.. Equilibria of the symmetric collinear restricted four-body problem with radiation pressure. *Astrophysics and Space Science* **361**(84), 1–12, 2016.

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