

Review of: "On the existence of precession of planets' orbits in Newtonian gravity"

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The article looks at the problem of a planet orbiting the Sun in the heliocentric reference frame, which is not inertial because the Sun orbits the common centre of mass of the Sun and planet. The author could probably have handled the problem much more easily by considering the dynamics in the reference frame of the Sun-planet barycentre. In this frame, the orbits would not precess. It is therefore not realistic that orbits around the Sun would precess. I am not sure what the mistake is with the article, but I am sure there is one considering this problem has been considered for many generations and more recent advanced computer models of the Solar System often do not make approximations like the Sun coincides with the Solar System barycentre (i.e., that its mass dominates the Solar System). The planet and Sun move on non-precessing ellipses about their common barycentre in Newtonian gravity. I am sure that the author will find this result upon setting up a numerical integration with some accurate scheme like the Runge-Kutta integrator. This may be a nice way to check the conclusions of the author.