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GRAVITY TENSION FOLDS, HILLS, DISCOVERING NEAR EARTH OBJECTS

Abstract

As gravity models search for stable configurations of three body problem, current lagrange models position a majority of mass on one side of the planet's orbit with orbital imbalance and do not explain trojan asteroids orbits turning around by 180degrees in tadpole orbits. Earth co-orbiting objects such as Trojan asteroids or Near Earth Objects (NEOs) orbit near Sun-Earth L4 or L5 Lagrange points in tadpole/horseshoe orbits for thousands to millions of years. With 10,000+ Jupiter Trojans discovered, only two Earth Trojans (ET) have been discovered so far including TK7 asteroid in 2010 and 202 XL5 asteroid. How do asteroids have such high inclination 13.8deg climbing up to 10M km+ gravity mountain ?

Study investigates the data, astrophysics, math, general relativity to propose modified lagrange points and Gravity Tension Folds (GTF) theory, which states high masses such as stars form 6+ lagrange points equally distributed and that perpendicularly intersect with planet orbit. If L4 and L5 forces are due to Sun's gravitational pull instead of Earth's, the previous L1/L2 Earth-Sun LPs would be primarily for the Earth Gravity Well. This RD study analyzes asteroid data XL5,from NEODys, cluster-inclination analysis near GTF with contours. Research explains how new lagrange points effect dV NEO velocity by 50

Gravity Tension Folds (GTF) are first introduced based on elastic stretching of cosmic web to to balance cosmic web and formation of gravity hill peaks or Lagrange point. If saddle critical points reside between Lagrange point gravity peaks, asteroid trajectory and dust spectra near saddles and tadpole orbits from telescopes would suggest a maxima near new Lagrange point hills.If lagrange gravity lanes or manifolds in tadpole orbits are carved by orbiting body, this suggests cosmic web and gravity lanes has restoring force similar to spring and GTF lagrange lines may be correlated with manifolds.

As 10,000+ Jupiter Trojan asteroids discovered, yet only two trojans were discovered near Earth, the new lagrange points and GTF folds hotential to help identify large amount of NEOs for future space missions and planetary defense. Models suggest new lagrange points (L2, L6) around Earth, stars and planetary bodies, which would potentially provide stable orbits and attract significant mass, dust, and plethora of asteroids. Research holds potential to better characterize gravitaty fields, improve spacecraft missions, interplanetary transport, and cosmic structure of the Multiverse.