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Retrograde Motion of Planets

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Abstract:- The paper introduced apparent retrograde motion, Synodic period of planets,Retrograde revolutions.

Keywords*: Retrograde motion, outer planets, earth's orbits, zig-zagging.*

1. Introduction

Retrograde motion is the orbital motion of a spatial body in a direction that is opposite of what is normal to a given system.

Apparent Retrograde motion is a phenomenon that the solar systems outer planets periodically undergo when they spend a few months moving through the constellations in the opposite directions to their usual direction of travel.

The retrograde motion is caused by the earth's own's motion around the sun.

Planet which are further from the sun spend more time in retrograde motions. Since they move compratively slowly around their orbits their apparent motion is dominated by the earth's orbital motion.

The planets move from West to east Acroos the night sky.

Rotation in opposite sense is called retrograde.

Some small moons orbits clockwise around their planet and are called retrograde satellites. When a planet is going through a period of apparent retrograde motion it appears through its moving in the opposite direction from east to west across the sky often looping or zig-zagging as it goes.

It means that planet is moving backward.

The backward movement retrograde is actually an illusion created by different speed at which the planet orbits the sun.

In reference to the motion of the outer planets through appear to move from east to west on a rightly basis in response to the spin of the earth they are most of the time drifting slowly eastward with respect to the background of stars.

The earth's completes it's orbit in a shorter period of time than the outerplanets.

In overtake an outerplanet the planet that are passing will first appear to stop it's eastward drift and it will then appear to drift back towards the west this is retrogradation. Since the planets seems to be moving in a opposite direction to typical direction for planets the more distant outer planets retrogradation is the synodic period of the planet.

Retrogradation puzzled ancient astronomers and was one reason why they named these bodies planets which in Greek means wandering in the geocentric model of the solar systems.

2. Retrograde Revolution

It refers to an orbital motion which is really backward relative to normal orbital motion but some of the moons of the outerplanet move backward relative to the general motion of the other moons of their planets and may comets have retrograde Revolution.

3. Conclusion

In reference to the motion of the outer planets as these planets appear to move from east to west the paper focuses on retrograde motion, synodic period and retrograde evolution.

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