

A Geometrical Perspective of the Elliptical Movement of the Planets a Consequence of Two Circular Forces Directed towards the Foci

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Kepler's law of planetary motion describes the motion of planets around the sun. According to the Copernicus paradigm, planets orbit the sun in a circular orbit. Later, eccentricity studies revealed that planetary orbits are ellipses rather than circles. Newton's gravitational theorem is based on this basis. Furthermore, these methods raise the question of how the circular forces of the planets form an elliptical path with a single focus point. The link between centrifugal forces and elliptical orbit was investigated in this study. Geometrical and numerical analysis are the emphasis of these interactions. (1) Ellipse formed by two circular forces acting upon an arbitrary point (Planet). (2) These circular forces are directed to the foci of the Ellipse. (3) At every location, the angle created by an elliptical and a circular tangent equals half of the angle formed by their respective circular orbital tangents. These relationships between the two circular forces cause the planets to follow an elliptical orbit.

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