

Cassini Ovals

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Abstract

In 1680, the French-Italian astronomer Giovanni Domenico Cassini introduced the “Cassini oval” while studying orbital motion. Intended as a possible alternative to the ellipses of Kepler’s laws of planetary motion, which were supported by observation but not theory, the Cassini ovals fell out of use upon the publication of Newton’s laws of motion, which provided the theoretical justification that Kepler was missing. In this talk, we will explore the geometry of Cassini ovals, their intended application to astronomy, and some modern-day applications.

References

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