



Spherical Shape of Planets

Source: [TH](#)

The spherical shape of planets is largely attributed to the interplay of [gravity](#) and **geometry**.

- **Gravity** is the primary force shaping planets, compelling them into a spherical form due to their **massive size**.
- A **sphere** offers the **most compact three-dimensional shape, minimising surface area for a given volume**.
- While commonly referred to as spherical, [planets and stars](#) are **actually oblate spheroids**, slightly flattened at the poles due to **centrifugal force** from rotation.
- **Rotation** creates a centrifugal force, resulting in a slight bulge at the equator, **making gravity weaker** in this region compared to the poles.
- **Gravity tends to shape celestial bodies into spheres**, while smaller bodies such as [comets](#) and [asteroids](#) maintain irregular shapes due to stronger [electromagnetic forces](#).

Read more: [Comet C/2020 F3 Neowise](#)

PDF Reference URL: <https://www.drishtias.com/printpdf/spherical-shape-of-planets>

