

# TOI-2109b planet

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**In news-** Recently the scientists have identified a planet which is named as TOI-2109b has the shortest orbit of any known gas giant to date.

## **About the new planet-**

- It is an **extremely hot Jupiter-like planet, which is estimated to be five times Jupiter's mass and revolves around its star in just 16 hours.**
- It was **discovered by scientists at NASA's Transiting Exoplanet Survey Satellite (TESS) in 2020,** an MIT (Massachusetts Institute of Technology)-led mission.
- It is located in the southern portion of the **Hercules constellation,** which is 855 light years from Earth.
- Due to its extremely tight orbit and proximity to its star, **the planet's day side is estimated to be at around 3,500 Kelvin, or close to 3227 degrees Celsius** which is about as hot as a small star.
- This makes TOI-2109b, the **second hottest planet detected so far.**
- They also speculate that TOI-2109b is in the process of **"orbital decay,"** or spiraling into its star.
- Considering its extremely short orbit, researchers predict that the **planet may spiral toward its star faster than other hot Jupiters.**