
Astronomers Discover Planet with 3 Suns

08/07/2016



WASHINGTON – Astronomers have discovered a planet even more exotic than Tatooine, from the “Star Wars” saga, with its two suns.

This new extra-solar world is known as HD 131399Ab and is the first one to be found in a wide orbit around three stars, according to a study published Thursday in Science magazine.

This fascinating world was discovered by a team of astronomers headed by the University of Arizona using the four “Very Large Telescope Project” telescopes at the European Southern Observatory.

Someone on the surface of the planet would either never experience complete nightfall or would see at least three sunrises and sunsets each day, depending on the season, each of which lasts longer than a human lifetime.

Orbits of the stars in a triple star system are usually unstable because of the complexity of – and constantly changing – gravitational forces of the system.

Therefore, it can be expected that any planet’s orbit will also be unstable with the result that the planet will quickly be expelled from the system.

However, somehow this newly found planet has survived in orbit around its three suns. This is an unavoidable fact that suggests that systems like this are much more common than scientists had thought to date.

HD 131399Ab is located about 320 light years from Earth in the constellation Centaurus and is only 16 million years old, thus making it one of the youngest exoplanets discovered to date.

It has a surface temperature of about 580 degrees Centigrade (1,076 degrees F) and a mass estimated to be four times that of Jupiter, our Solar System’s largest planet.

Kevin Wagner, the main author of the study, said that the planet completes one orbit in 550 Earth years, and all three of its suns are visible simultaneously at about the midpoint in its orbital circuit.

One of the stars is quite brilliant, but the other two, which are very close together, are less so.

Wagner said that, due to the angular separation of the three suns, for about 140 Earth years of each of the planet's orbits it is under constant illumination from all three stars.
