

Exoplanets - Planets Beyond Solar System

What is an Exoplanet?

In the Solar System, all the planets orbit around the Sun. Sun is a star. Likewise, there are many other stars in the universe. Exoplanets are planets that orbit around other stars in the universe. Exoplanets are also called extrasolar planets.

Which is the closest Exoplanet?

The closest exoplanet is named Proxima Centauri b. It is a planet orbiting the closest star to the Sun, named Proxima Centauri.

Why is it hard to detect the exoplanets directly with telescopes?

Exoplanets are hard to be detected directly with telescopes as they are close to the stars they orbit. The brightness of stars prevents it from being detected easily.

How do we detect exoplanet?

1. Transit method
2. Doppler spectroscopy

What is the transit method of exoplanet detection?

Whenever a planet passes in front of its star, it is called a transit. Whenever a planet transits in front of its star, a small amount of star's light is obstructed. Hence, there will be a reduction in the brightness of the star. Astronomers can detect the change in brightness of the star, which helps them in evaluating the size of the planet. Astronomers are able to detect the distance of the exoplanet from its star by studying the time between transits.

Where are exoplanets?

All the stars have at least 1 planet revolving around them. Most of the exoplanets discovered so far are located in Milky Way galaxy.

How many exoplanets have been confirmed?

Approximately 4,000 exoplanets have been confirmed. These exoplanets were found in 3,096 systems. Out of these systems, 678 systems have more than one planet.

Which is the least massive exoplanet?

The least massive known exoplanet is named as Draugr. To get an understanding of its size, this exoplanet is twice the mass of the moon.

Which is the most distant discovered exoplanet?

It is named as SWEEPS-11/SWEEPS - 04. It is located 27,710 light-years away.

Which is the hottest exoplanet discovered?

The hottest exoplanet discovered is Kepler - 70b

Which is the biggest exoplanet discovered?

The biggest exoplanet discovered is Kepler - 39b.