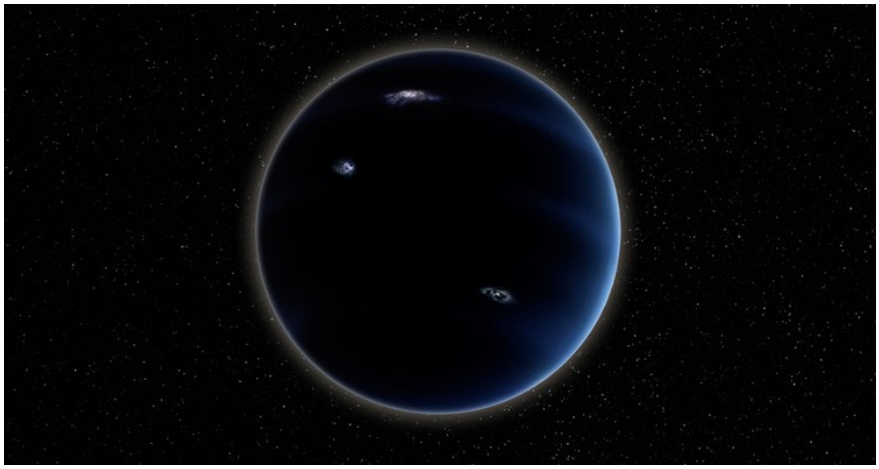
Is the 9th planet in the solar system 10 times the size of Earth?

Planets are considerably smaller than the stars found in the universe, but they do have some fascinating and unique features such as textures, atmospheres, elements present, rings, etc. Here are lesser known facts about planets.

Planet 9



Scientists believe there is a ninth planet in our solar system, which is 10 times the size of Earth. The position of this planet is still not confirmed but it is certain that it exists thanks to its gravitational effect on other objects.

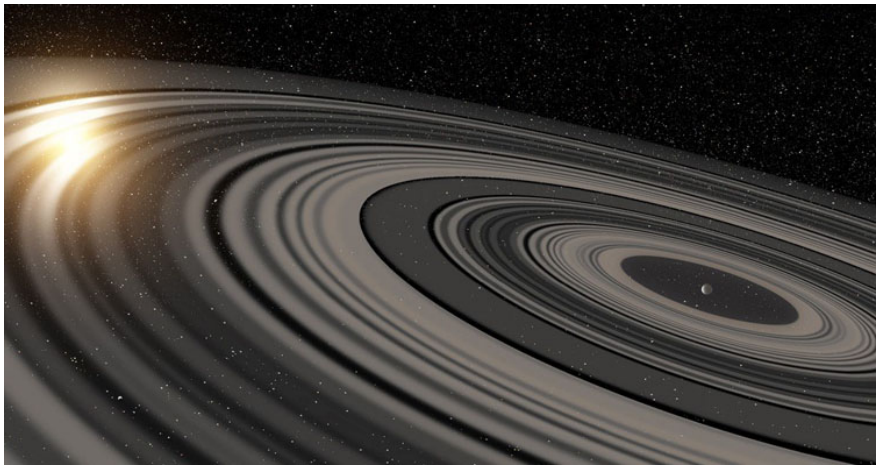
Also known as "Planet 9", it is 10 times more massive than Earth and moves along an elongated orbit at a distance 400 times the distance between Earth and the Sun. Planet 9's orbit is also probably 15 to 25 degrees off the main orbital plane of the solar system, where the rest of the planets move.

The idea of ??the existence of this new planet was proposed in 2014, and it quickly became popular among astronomers. This speculation is based on samples of objects in a debris ring in the outer belt known as the "Kuiper Belt."

It has been observed that the objects here are clumped together in a manner similar to the presence of gravity from some large object. Since this discovery, astronomers have tried to find a lot of evidence to support the existence of the 9th planet in the solar system.

However, what keeps us from saying for sure that this planet completely exists is our limited understanding of the Kuiper Belt.

J1407b



There is an exoplanet called J1407b, it has more than 30 rings around it, and each ring is tens of millions of kilometers in diameter. Its giant rings are 200 times larger than those of Saturn.

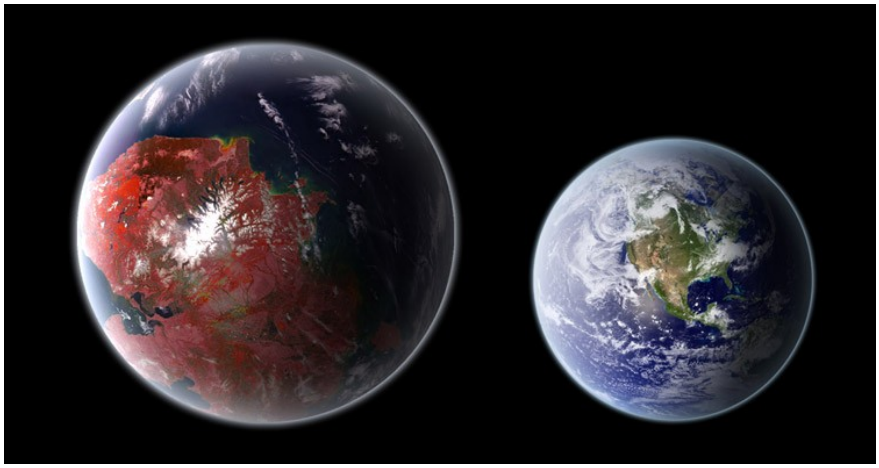
Saturn is the planet with the largest rings in our solar system, but its rings are too small compared to this exoplanet, but it is too far away to be able to detect it. observed directly.

J1407b was discovered in 2012, recent studies have shown that the ring system of this planet is 120 million km long (30 rings in total), and has the form of obscure dust particles. light with a total mass close to that of the Earth.

Scientists think that such giant rings were formed when these planets were young. Over a long period of time, the rings will thin out and disappear, until eventually it may only be left like the rings of Saturn today. Because of this, it is possible that our Saturn also had a very large ring before.

J1407b orbits a Sun-like star, but 95% of its light is blocked by this dense ring system. Astronomers have predicted that these rings will become significantly thinner in the next few million years.

Kepler-442b

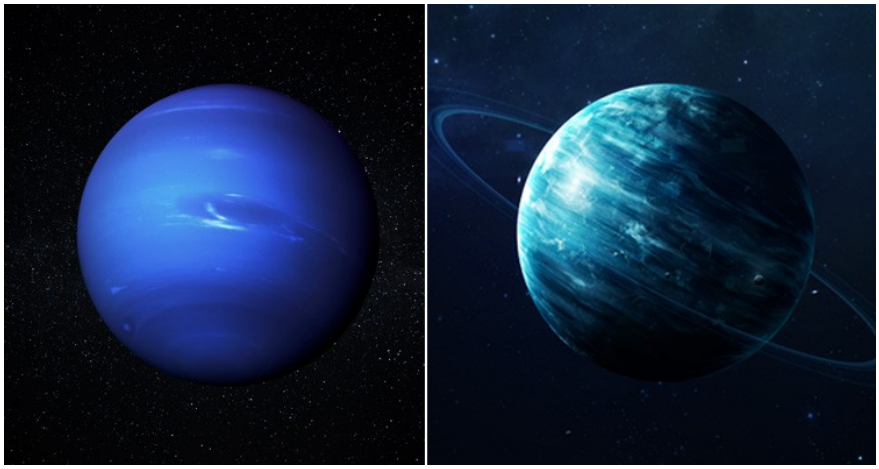


According to an index developed in 2015, Earth is not the most habitable planet ever found. There is a rocky exoplanet called Kepler-442b, more than q thousand light-years away, roughly the same size as Earth. This planet has a habitable index of 0.836 while Earth is at 0.829.

Kepler-442b is an exoplanet, likely a terrestrial planet, orbiting in the habitable zone of the orange dwarf Kepler-442, approximately 1,206 light-years from Earth. The planet was discovered by NASA's Kepler spacecraft using the radial velocity method. NASA announced exoplanet confirmation on January 6, 2015.

The scale for determining the habitability of planets is based on the "Goldilocks Zone" - the exact distance from the planet to its sun - the distance that allows liquid water to exist. In addition, the new index takes into account the density of rocks, the element of the planets, as well as the eccentricity of their orbits and albedos. Accordingly, the planet Kepler-442b is thought to be more suitable for life than Earth.

Neptune and Uranus have oceans of diamonds



According to the researchers, it is possible that Neptune and Uranus have oceans of liquid diamond. Experiments conducted under high pressure simulating conditions on these gas giants show that diamond fragments can float on a sea of ??liquid carbon.

The study builds on detailed measurements of diamond's melting point - the first detailed measurements of diamond's melting point. Scientists conducted experiments to liquefy diamonds under high pressure and heat using a laser - diamonds are subjected to pressures 40 million times greater than that found at sea level in The earth.

Accordingly, when conducting experiments under similar conditions to the environments of Neptune and Uranus. The results showed that solid diamond fragments began to appear on the background of liquid diamond. They even float like icebergs on water.

And it is estimated that about 10% of Neptune and Uranus are made up of carbon. Therefore, it is possible to form oceans of diamonds on these two planets. But for now, that's still just a theory and exactly how true reality is, it remains to be seen by scientists who can reach the surface of these two planets.