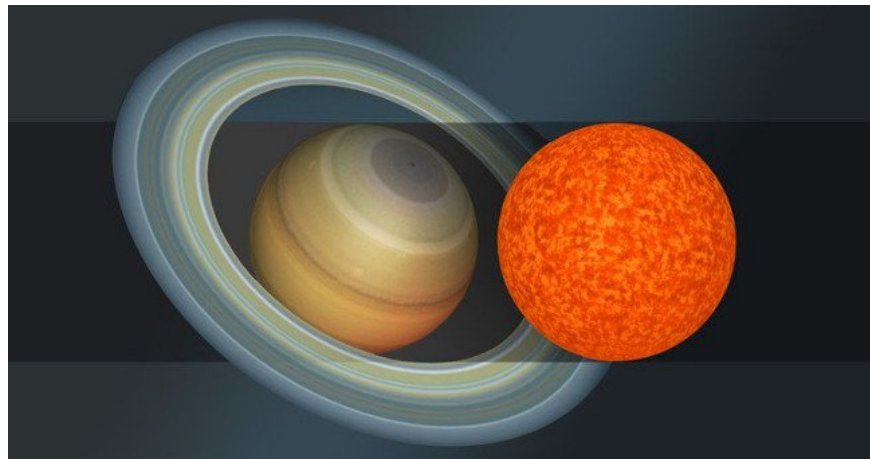


# Discover the smallest star in the universe, about 600 light-years from Earth

The EBLM star J0555–57Ab is 600 light-years away from Earth but has 300 times the gravitational pull of our planet, the smallest of them to date.

Scientists at Cambridge University, England, have discovered the star EBLM J0555–57Ab is the smallest size to date. It is only slightly larger than Saturn (with a radius of 58,232 km), which is about 2,000 - 3,000 times weaker than the Sun.

1. Which star lives the longest, brightest, biggest, . in the universe?
2. How big can the stars in the universe be?



Compare the size of EBLM J0555–57Ab compared to Saturn.(Photo: Alexander Boetticher.)

The EBLM star J0555–57Ab is 600 light-years from Earth but has 300 times the gravitational pull of our planet.

EBLM J0555–57Ab is part of a binary star system, orbiting a larger star named EBLM J0555-57A. Despite its small size, it still has enough mass to allow nuclear fusion to occur inside the core, converting hydrogen into helium.

According to Alexander Boetticher, a member of the research team, if the EBLM J0555–57Ab has a slightly smaller mass, the fusion reaction of the hydrogen inside the core cannot be maintained and it will turn into a brown dwarf.

This star was discovered by scientists as it moved in front of the larger star it orbited around. It is estimated that the volume of EBLM J0555-57Ab is only equivalent to the Trappist-1 star discovered earlier this year but with a radius of less than 30%.

This finding by scientists shows how small stars can be.

EBLM J0555-57Ab and small, fuzzy and cool stars capable of storing liquid water on the surface should be considered as potential candidates for living planets. The most popular stars in the universe are 20% smaller than the Sun but there are many things we don't know about them.

You finished reading the article "**Discover the smallest star in the universe, about 600 light-years from Earth**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.