The amateur astronomer discovered the unique star: it 'distorted' into a teardrop shape

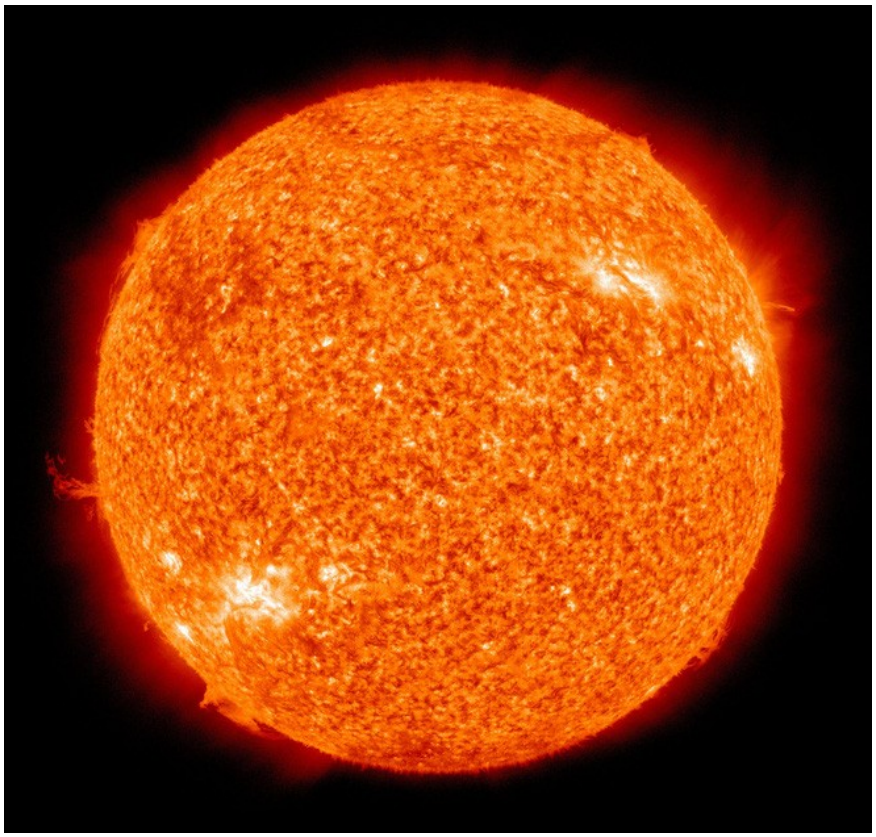
Based on data transmitted from NASA satellites, the scientists discovered a strange star 1,500 light-years from Earth in the shape of a teardrop.

When any star appears strange, astronomers will immediately notice it. Through data obtained from NASA's TESS satellite, an amateur astronomer has discovered the anomalies of the star HD74423 - a star possessing a unique property that has never been recorded in history.

This star is 1,500 light-years from Earth and is gaining interest in the astronomy community. However, astronomers could not understand it.

"The first thing that caught my attention was that its chemical properties were very strange," Simon Murphy said. He is the co-author of the postdoctoral science and PhD report at the Sydney Astronomical Institute. *"Stars like this are usually very rich in metals but they are not. This makes it a rare type of star . "*

This star is 1.7 times the mass of our Sun and is capable of pulsating in the rhythm of a hemisphere. Impulse abilities are often seen in stars, even the Sun is no exception. Hot air escaping from the Sun's surface causes this giant star to oscillate in space.



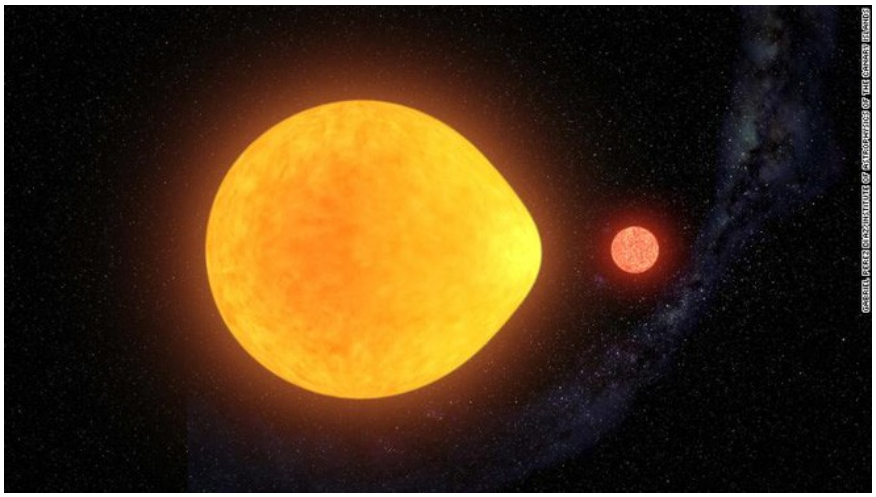
All stars with this ability vibrate no matter what direction you observe it, factors such as the age of the star or the level and intensity of vibration will not affect this fact. But the new discovery of HD74423 shows something different: this is the first star to only fluctuate on one side.

"From the 1980s, we have theoretically known that a star like this should exist , " said Don Kurtz, co-author of the report and Professor of Collaboration at the University of Sydney. He was originally a professor from Central Lancashire University in England. *"I've been looking for a star like this for almost 40 years and finally found it . "*

The scientific report is published this Monday in Nature Astronomy.

Scientists have figured out why this star is so unique. It is a star in the binary star system - the system with two planets orbiting each other. In it, the remaining star is a small red star often seen in the universe.

These two stars have very close orbits, and after just two days on Earth, they complete a spin around each other. Because of this approach, the gravity of the red star affects the impulses of the star we are talking about and gives it a teardrop shape, not a regular sphere.



Data from NASA's TESS satellite is provided to the public and an amateur astronomer has discovered this star in a bunch of data.

"Data from the TESS satellite helps us to observe the difference in the brightness of a star. This brightness is affected by gravity distortion and impulses," said Gerald Handler, co-author of the report. professor at the Nicolaus Copernicus Astronomical Center, Poland.

The scientists determine the origin of the pulse by observing the fluctuations in the brightness, angle and orbital position of the star.

"As the double star system moves, different parts of the star are likely to be pulsed out," said David Jones, co-author and researcher at the Canary Island Astrophysics Institute, Spain. *"Sometimes we see the face of the star facing the red star and sometimes we see the outside . "*

The researchers say they are aware of the star's existence and hope to *"find more mysteries in the TESS satellite data"* .