

The Mistaken Star J1407b

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Subject: Science

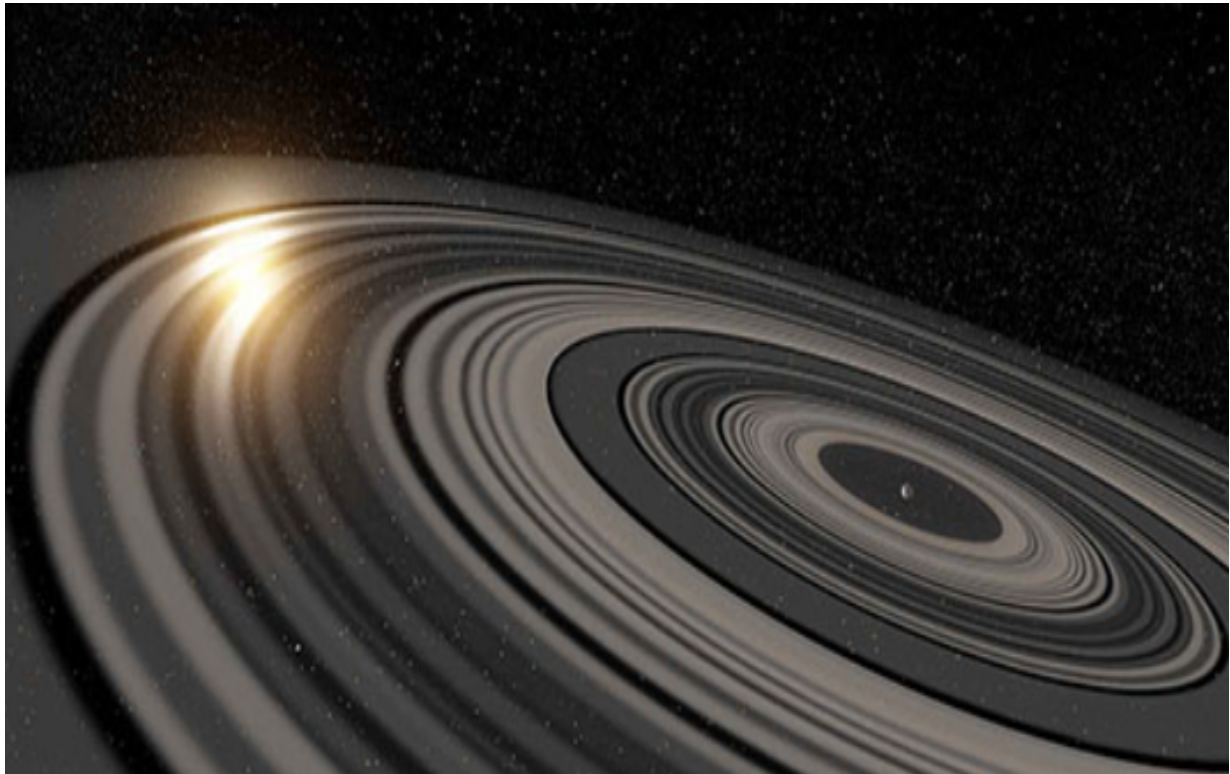


Image of J1407b

If you don't know anything about J1407b here is an introduction to what is:

<https://www.youtube.com/watch?v=e9JPhnFW9cY>

Introduction

J1407b is a magnificent exoplanet that is 433.8 light years away from Earth. But, do you want to know what got me interested in this exoplanet? Its beautiful massive rings, the first exoplanet I ever discovered, are 20 times bigger than my second favorite planet, Saturn. Despite being larger than all the eight planets, it is surprisingly younger than all of them. It is only 16.01 million years old while the planets near the sun are billions of years old. But, there is one little issue I have with J1407b. Google keeps saying that J1407b is a star but I strongly disagree with this statement. So today, I am going to be showing you why J1407b shouldn't even be called a star.

Body Paragraph

J1407b is a big planet, but it's not fit to be a star. Stars are (3x) really massive, much bigger than Jupiter. To be a star an object needs to have at least 75 to 80 times the mass of Jupiter. J1407b is only 20 to 40 times the mass of Jupiter, which is obviously a lot, but of course not enough to be a star. It's just a giant gas planet, like Jupiter. The reason J1407b looks so big is that it has a huge ring system around it. The rings make the planet look much larger than it really is. It is the rings, not the planet itself, that make J1407b appear so big in the sky.

Conclusion

In conclusion, **J1407b** is a really interesting exoplanet! It's much bigger than Saturn, and what makes it so fascinating is its gigantic rings. These rings are over 200 times bigger than the ones around Saturn! Even though J1407b is a huge, impressive-looking planet, it's not actually a star. It's just a big gas planet with amazing rings around it. Scientists are interested in studying deeper into J1407b and learning more about other exoplanets with huge rings like it. In the future, scientists might even send a special mission to visit J1407b and get an even closer look at this incredible world!

Bonus + Predictions

According to the University of Rochester, they are predicting that, "The mass of the satellite could be between that of Earth and Mars. The satellite would have an orbital period of approximately two years around J1407b (University of Rochester)astronomers expect that the rings will become thinner in the next several million years and eventually disappear as satellites form from the material in the disks."

Why J1407b shouldn't be a star. First, according to Quora.com," J1407b's mass is between 20–40 Jupiter's, which is high, but an object needs at least 75–80 Jupiter's of mass to sustain hydrogen fusion and become a true star."(Quora) Second, according to Quora.com, "it is not massive enough. It is as large as it is because it is very young." (Quora) Last, according to Quora.com, "J1407b is a large gas giant with a mass of between 13 and 26 Jupiters. It is probably a normal size for a planet of that mass. It does not have anything close to enough mass to become a star. What is so physically large is not the planet itself, but its ring system "(Qoura) In my own words all these three reasons are saying J1407b is not star because its mass is only 20-40 times the mass of Jupiter. But for something to be a star, it needs to have at least 75-80 times the mass of Jupiter to carry hydrogen fusion. It's a young exoplanet, so that's why it's so big. But it's not massive enough to be a star. J1407b is a large gas giant, not a star. The thing that makes it look so big is its huge ring system, not the planet itself.

Time Took: 30 minutes and 25 seconds.

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Appendix - Jokes

Saturn: I have the most beautiful **“rings”**. J1407b: Am I a joke to you?

