



Rare Star's Mystery Signals: Galactic Discovery Unveiled

Description

Years ago, a special telescope in Australia saw something strange in space. It was a strong radio signal from not far away. It flashed like a pulsar, but with longer breaks and pulses. Scientists found more signals, and now they know where one of them comes from.

This signal comes from a tiny red star and a white star nearby. The stars orbit each other and make the odd radio waves. The strange thing is that normal red stars can't do this, so there must be something special about these stars.

The team used a big telescope in South Africa to study the stars closely. They discovered that the two stars could be a red dwarf and a white dwarf. These stars are very dense and can create strong beams of light. If they're close enough, the white dwarf could be taking material from the red dwarf, causing the strange flashes.

More research is needed to confirm this, but if it's true, these stars would be very rare in our galaxy.

Vocabulary List:

1. **Telescope** /'telɪskoʊp/ (noun): An optical instrument for viewing distant objects by magnifying their images.
2. **Signal** /'sɪgnəl/ (noun): A sound or an action that conveys information.
3. **Pulsar** /'pʌl.sər/ (noun): A highly magnetized rotating neutron star that emits beams of electromagnetic radiation.
4. **Orbit** /'ɔːr.bɪt/ (verb): To revolve around a star planet or moon in a regular repeating path.
5. **Dwarf** /dwɔːrf/ (noun): A star that is relatively small and low in luminosity compared to other stars.
6. **Research** /'riːsɜːrtʃ/ (noun): The systematic investigation into a subject in order to discover or revise facts theories or applications.

Comprehension Questions

Multiple Choice

1. What kind of telescope in Australia detected the strange radio signal?

Option: Optical telescope



- Option: Radio telescope
- Option: Infrared telescope
- Option: X-ray telescope

2. What type of stars are thought to be producing the odd radio waves?

- Option: Blue giants
- Option: Red giants
- Option: Red dwarf and white dwarf
- Option: Yellow dwarfs

3. Where did the team use a telescope to closely study the stars?

- Option: South America
- Option: South Africa
- Option: Asia
- Option: Europe

4. Which star might be taking material from the other, causing the strange flashes?

- Option: Red dwarf
- Option: White dwarf
- Option: Yellow dwarf
- Option: Blue giant

5. What could the white dwarf and red dwarf stars create due to their density?

- Option: Strong beams of light
- Option: X-ray radiation
- Option: Black holes
- Option: Supernovae

6. If confirmed, these stars would be very rare in which location?

- Option: The solar system
- Option: Our galaxy
- Option: A nearby galaxy
- Option: The Milky Way

True-False

7. The strange radio waves were detected by an optical telescope.



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8. Normal red stars are known to produce the peculiar radio signals.
9. The team used a small telescope in South Africa to study the stars.
10. White dwarfs and red dwarfs are not as dense as other types of stars.
11. More research is not required to confirm the nature of these stars.
12. If true, these stars would be common in our galaxy.

Gap-Fill

13. The signal comes from a tiny red star and a white star _____.
14. Scientists found more signals, and now they know _____ one of them comes from.
15. The two stars could be a red dwarf and a white dwarf, making them very _____.
16. Normal red stars cannot produce the radio waves, so there must be something _____
about these stars.
17. If confirmed, these stars would be very rare _____ our galaxy.
18. More research is needed to confirm this, but if it's true, these stars would be very
_____ in our galaxy.

Answer

Multiple Choice: 1. Radio telescope 2. Red dwarf and white dwarf 3. South Africa 4. White dwarf 5. Strong beams of light 6. Our galaxy

True-False: 7. False 8. False 9. False 10. False 11. False 12. False

Gap-Fill: 13. nearby 14. where 15. dense 16. special 17. in 18. rare

Vocabulary quizzes



Multiple Choice (Select the Correct answer for each question.)

1. Which term refers to material with particular properties used in research?
Option: Caffeinated
Option: Inflammation
Option: Substances
Option: Apoptosis
2. What term describes a community of living organisms in conjunction with the nonliving components of their environment?
Option: Discovery
Option: Microbes
Option: Ecosystem
Option: Thriving
3. In astronomy what is a term used to describe a celestial body that is smaller than a planet?
Option: Arrhythmia
Option: Pulsar
Option: Orbit
Option: Dwarf
4. What term refers to the identification of the nature of an illness or other problem by examination of symptoms?
Option: Symptoms
Option: Consumption
Option: Dehydration
Option: Diagnosis
5. Which term relates to a belief or behavior passed down within a group or society with symbolic meaning?
Option: Binge
Option: Tradition
Option: Prosperity
Option: Risk
6. What plant is commonly associated with holiday traditions such as kissing under it?
Option: Mistletoe
Option: Prevent
Option: Contaminating
Option: Researchers
7. Which term describes a substance that contains caffeine?
Option: Risk



- Option: Research
- Option: Caffeinated
- Option: Complementary

8. What activity involves systematically investigating into a subject to discover facts interpret information and reach conclusions?

- Option: Discovery
- Option: Telescope
- Option: Signal
- Option: Research

9. What disorder causes an irregular heartbeat rhythm?

- Option: Arrhythmia
- Option: Binge
- Option: Substances
- Option: Prosperity

10. What term refers to microscopic organisms that exist virtually everywhere?

- Option: Diverse
- Option: Microbes
- Option: Apoptosis
- Option: Medicinal

Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)

11. _____ is the body's response to injury or infection often characterized by redness swelling and pain.

12. Improper waste disposal can lead to soil and water resources being _____ by harmful substances.

13. Excessive alcohol _____ can lead to serious health issues such as liver damage.

14. In a healthy environment diverse species of plants and animals can be seen _____ together.

15. Regular exercise and a balanced diet can help _____ many chronic diseases.

16. Eating a large amount of food in a short period known as a eating _____ can lead to



various health issues.

17. Fever cough and fatigue are common _____ associated with the flu.

18. The _____ of antibiotics revolutionized the field of medicine allowing treatment of bacterial infections.

19. Certain plants have _____ properties and are used in traditional medicine to treat various ailments.

20. Investments in education and infrastructure can lead to economic growth and _____ for a nation.

Matching Sentences (Match each definition to the correct word from the vocabulary list.)

21. is a process of programmed cell death that occurs in multicellular organisms.
22. A flashing light can be used as a to indicate a warning or message.
23. A is an optical instrument used to observe distant objects such as planets and stars.
24. A is a highly magnetized rotating neutron star that emits beams of electromagnetic radiation.
25. The path that a planet takes around a star is called its .
26. Engaging in extreme sports involves a certain level of to one's safety.
27. are individuals who conduct systematic investigations to establish facts and develop new theories.
28. In medicine therapies are used alongside conventional treatments for a holistic approach to healing.
29. The lack of adequate fluid intake can lead to which can be harmful to the body.
30. Economic stability and growth contribute to the overall of a society.

Answer

Multiple Choice: 1. Substances 2. Ecosystem 3. Dwarf 4. Diagnosis 5. Tradition 6. Mistletoe 7. Caffeinated 8. Research



9. Arrhythmia 10. Microbes

Gap-Fill: 11. Inflammation 12. Contaminating 13. Consumption 14. Thriving 15. Prevent 16. Binge 17. Symptoms 18. Discovery 19. Medicinal 20. Prosperity

Matching sentence: 1. Apoptosis 2. Signal 3. Telescope 4. Pulsar 5. Orbit 6. Risk 7. Researchers 8. Complementary 9. Dehydration 10. Prosperity

CATEGORY

1. Health - LEVEL2

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Author

aimeeyoung99

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