



Students Discover Unusual Metal-Free Star in Milky Way

Description

A group of students from the University of Chicago has found an ancient star named SDSS J0715-7334. This star should not be in the Milky Way because it formed in another galaxy before drifting into ours. The students made this discovery with the help of Professor Alex Ji and data from the Sloan Digital Sky Survey (SDSS). This project helps scientists study stars, black holes, and galaxies.

The students discovered SDSS J0715-7334 during an astronomy class. They were examining many stars when one star caught their attention. Professor Ji said this finding changed their plans for the course. The star has very little heavy material, such as carbon and oxygen, making it one of the oldest stars ever seen.

The researchers found that SDSS J0715-7334 originated in the Large Magellanic Cloud, a nearby galaxy. It drifted into the Milky Way billions of years ago. Professor Ji called it an “ancient immigrant,” highlighting that it gives a unique look at the early universe.

This discovery is special because it was made by students. One student, Ha Do, mentioned how exciting it is to contribute to such important research. Their experience might inspire them to continue studying science in the future.

Vocabulary List:

1. **ancient** //ˈeɪnfənt// (adjective): very old from a time long ago
2. **originated** //əˈrɪdʒəˌneɪtɪd// (verb): began in or came from a place
3. **drifted** //ˈdrɪftɪd// (verb): moved slowly without a clear direction
4. **immigrant** //ˈɪmɪgrənt// (noun): person who moved from one country to another
5. **discovery** //dɪˈskʌvəri// (noun): finding something that was unknown before
6. **galaxy** //ˈɡæləksi// (noun): a very large group of stars and planets

Comprehension Questions

Multiple Choice

1. What is the name of the ancient star discovered by the students?

Option: SDSS J0715-7334



- Option: HD 140283
- Option: Sirius A
- Option: Proxima Centauri

2. In which galaxy did SDSS J0715-7334 originally form?

- Option: Milky Way
- Option: Andromeda
- Option: Large Magellanic Cloud
- Option: Sombrero Galaxy

3. Who helped the students in their discovery of the star?

- Option: Professor Alex Ji
- Option: Professor Jane Doe
- Option: Dr. John Smith
- Option: Professor Emily White

4. What type of survey helped in the discovery of SDSS J0715-7334?

- Option: Hubble Space Telescope Survey
- Option: Sloan Digital Sky Survey
- Option: Kepler Mission
- Option: Galileo Survey

5. What characteristic does SDSS J0715-7334 have in terms of heavy materials?

- Option: High concentration of heavy materials
- Option: Very little heavy material
- Option: Moderate concentration of heavy materials
- Option: No heavy material at all

6. Which statement best describes the nature of the discovery of SDSS J0715-7334?

- Option: It was discovered by professional astronomers.
- Option: It was discovered by a group of students.
- Option: It was discovered by AI technology.
- Option: It was discovered by the public through a petition.

True-False

7. SDSS J0715-7334 is located in the Milky Way galaxy.



8. The discovery was made by students during an astronomy class.
9. Professor Alex Ji expressed excitement over the student's finding.
10. Ha Do is a lecturer at the University of Chicago.
11. The star SDSS J0715-7334 has a high amount of carbon and oxygen.
12. The discovery of SDSS J0715-7334 could inspire the students to pursue science further.

Gap-Fill

13. The star SDSS J0715-7334 formed in another galaxy before drifting into the _____.
14. Professor Ji referred to SDSS J0715-7334 as an ancient _____ to highlight its origins.
15. The researchers found SDSS J0715-7334 to have very little heavy _____ like carbon and oxygen.
16. The discovery made by the students was supported by data from the Sloan _____ Survey.
17. Ha Do mentioned how exciting it is to contribute to important _____ research.
18. The discovery of the ancient star changed the students' plans for the _____ course.

Answer

Multiple Choice: 1. SDSS J0715-7334 2. Large Magellanic Cloud 3. Professor Alex Ji 4. Sloan Digital Sky Survey 5. Very little heavy material 6. It was discovered by a group of students.

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

Gap-Fill: 13. Milky Way 14. immigrant 15. material 16. Digital 17. science 18. astronomy

Vocabulary quizzes



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

1. What do satellites primarily monitor in Earth's orbit?
Option: Weather patterns
Option: Wildlife
Option: Urban development
Option: Cultural trends
2. Which type of asteroids are considered potentially dangerous?
Option: Minor asteroids
Option: Hazardous asteroids
Option: Rocky asteroids
Option: Gas giants
3. What force keeps satellites in orbit around the Earth?
Option: Friction
Option: Electromagnetism
Option: Gravity
Option: Momentum
4. What term is used for a collection of data typically used for analysis?
Option: Database
Option: Dataset
Option: Spreadsheet
Option: Report
5. What do astronomers often celebrate as a significant achievement in their field?
Option: Exploration
Option: Discovery
Option: Innovation
Option: Evolution
6. What is a software that mimics the hardware or software environment called?
Option: Simulator
Option: Emulator
Option: Interpreter
Option: Compiler
7. What term describes the collision of celestial bodies, often resulting in a significant event?
Option: Collision
Option: Impact
Option: Drift



Option: Passage

8. What is the unit of measurement for a very large amount of data, often used in datasets?

- Option: Gigabytes
- Option: Terabytes
- Option: Petabytes
- Option: Megabytes

9. What is the path called that a celestial body follows around another?

- Option: Sphere
- Option: Orbit
- Option: Radius
- Option: Axis

10. Who are the individuals primarily responsible for creating software applications?

- Option: Users
- Option: Analysts
- Option: Developers
- Option: Managers

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

11. The _____ ruins were discovered during the archaeological survey.
12. The _____ community has greatly contributed to the cultural landscape of the city.
13. Over the centuries, the continents have _____ apart due to tectonic activity.
14. Scientists use technology to _____ changes in the environment.
15. The _____ of the company's assets was conducted by financial analysts.
16. The new software _____ has attracted many customers.
17. The results of the national _____ indicated a need for more infrastructure.
18. The software has been _____ to improve its performance.
19. The game developers created a demo version that is _____ on multiple platforms.
20. The team's findings were _____ by independent researchers.



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

21. Satellites travel in a predetermined orbit around the Earth.
22. The discovery of a new galaxy expanded our understanding of the universe.
23. Astronomers can detect asteroids that are on a collision course with Earth.
24. Some asteroids are classified as hazardous due to their size and proximity to Earth.
25. Astronomers study celestial bodies to better understand the universe.
26. Gravity is the force that binds celestial bodies in space.
27. Developers continuously update software to enhance user experience.
28. A large dataset can contain petabytes of information about different phenomena.
29. The latest research study generated petabytes of data for analysis.
30. A proper valuation of assets is crucial for investment decisions.

Answer

Warning: Undefined array key "answer" in **/home/u750883576/domains/esl-news.com/public_html/wp-content/plugins/gpt-post-quiz/includes/admin/forms/gpoq-post-pdf-questions.php** on line **531**

Warning: Undefined array key "answer" in **/home/u750883576/domains/esl-news.com/public_html/wp-content/plugins/gpt-post-quiz/includes/admin/forms/gpoq-post-pdf-questions.php** on line **531**

Warning: Undefined array key "answer" in **/home/u750883576/domains/esl-news.com/public_html/wp-content/plugins/gpt-post-quiz/includes/admin/forms/gpoq-post-pdf-questions.php** on line **531**

Warning: Undefined array key "answer" in **/home/u750883576/domains/esl-news.com/public_html/wp-content/plugins/gpt-post-quiz/includes/admin/forms/gpoq-post-pdf-questions.php** on line **531**

Warning: Undefined array key "answer" in **/home/u750883576/domains/esl-news.com/public_html/wp-content/plugins/gpt-post-quiz/includes/admin/forms/gpoq-post-pdf-questions.php**



on line **531**

Warning: Undefined array key "answer" in **/home/u750883576/domains/esl-news.com/public_html/wp-content/plugins/gpt-post-quiz/includes/admin/forms/gpoq-post-pdf-questions.php** on line **531**

Warning: Undefined array key "answer" in **/home/u750883576/domains/esl-news.com/public_html/wp-content/plugins/gpt-post-quiz/includes/admin/forms/gpoq-post-pdf-questions.php** on line **531**

Warning: Undefined array key "answer" in **/home/u750883576/domains/esl-news.com/public_html/wp-content/plugins/gpt-post-quiz/includes/admin/forms/gpoq-post-pdf-questions.php** on line **531**

Warning: Undefined array key "answer" in **/home/u750883576/domains/esl-news.com/public_html/wp-content/plugins/gpt-post-quiz/includes/admin/forms/gpoq-post-pdf-questions.php** on line **531**

Warning: Undefined array key "answer" in **/home/u750883576/domains/esl-news.com/public_html/wp-content/plugins/gpt-post-quiz/includes/admin/forms/gpoq-post-pdf-questions.php** on line **531**

Multiple Choice: 1. Weather patterns 2. Hazardous asteroids 3. Gravity 4. Dataset 5. Discovery 6. Emulator 7. Impact 8. Petabytes 9. Orbit 10. Developers

Gap-Fill: 11. ancient 12. immigrant 13. drifted 14. detect 15. valuation 16. offering 17. survey 18. updated 19. playable 20. confirmed

Matching sentence: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

CATEGORY

1. Sci/Tech - LEVEL2

POST TAG

1. ESL learning
2. esl news
3. group of students
4. Level 2
5. Milky Way
6. tiny star

Tags

1. ESL learning
2. esl news
3. group of students
4. Level 2
5. Milky Way



6. tiny star

Date Created

2026/04/19

Author

aimeeyoung99

ESL-NEWS.COM