



Hubble Unveils an Ancient Observer of a Galactic Merger

Description

NGC 2005, a globular cluster located in the Large Magellanic Cloud, provides significant evidence supporting the theory of galaxies evolving through mergers. This stunning image, captured by the Hubble Space Telescope, showcases the intricate beauty of NGC 2005, positioned about 750 light-years from the core of the LMC and approximately 162,000 light-years from Earth.

Globular clusters like NGC 2005 contain millions of old stars, akin to fossils on Earth, shedding light on the characteristics of ancient stars. Scientists believe that studying these clusters is crucial in understanding the evolution of galaxies, as they reveal evidence of galactic mergers.

NGC 2005 stands as a testament to this theory, with its unique chemical composition differing from other stars in the LMC. This variance suggests that the LMC experienced a merger with another galaxy in the distant past. While the other galaxy has long faded into history, NGC 2005 remains as a witness to this ancient cosmic event.

In conclusion, the existence of NGC 2005 supports the concept of galaxies evolving through mergers, offering valuable insights into the cosmic evolution of our universe.

Vocabulary List:

1. **NGC 2005** // (noun): A globular cluster located in the Large Magellanic Cloud.
2. **Globular cluster** // (noun): A spherical collection of stars held together by gravity.
3. **Merger** // (noun): The process of two or more galaxies combining to form a new galaxy.
4. **Evidence** // (noun): Facts or information that indicate whether a belief or proposition is true or valid.
5. **Cosmic** // (adjective): Relating to the universe or cosmos.
6. **Evolution** // (noun): The gradual development or change of something over time.

Vocabulary quizzes

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

1. Which word describes something that is widely recognized and well-established?

Option: Tragically

Option: Iconic

Option: Administrator



Option: Authentication

2. The process of gradual development or change over time is known as:

- Option: Merger
- Option: Opting
- Option: Breakthrough
- Option: Evolution

3. Which term refers to something that is derived from living matter?

- Option: Cybersecurity
- Option: Opting
- Option: Paleontology
- Option: Organic

4. What word is often used to describe the glamor and excitement associated with show business?

- Option: Mourns
- Option: Glitz
- Option: Evidence
- Option: Stagnation

5. A topic that causes disagreement or argument is said to be:

- Option: Controversial
- Option: Parameters
- Option: Closures
- Option: Intriguing

6. What term describes a lack of activity growth or development?

- Option: Tragically
- Option: Administrator
- Option: Stagnation
- Option: Globular cluster

7. What word describes the act of postponing or being late in completing something?

- Option: Accountability
- Option: Delay
- Option: Mourns
- Option: Parameters

8. An individual in charge of managing or organizing a system or process is an:



- Option: Darker truth
- Option: Administrator
- Option: NGC 2005
- Option: Breakthrough

9. Facts or information indicating whether a belief or proposition is true or valid is called:

- Option: Evidence
- Option: _CYBERSECURITY_
- Option: Accountability
- Option: Authentication

10. In research the factors or limits that outline the scope of a study are termed:

- Option: Opting
- Option: Insider
- Option: Parameters
- Option: Spicules

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

11. The _____ activist fought for protection of wildlife and natural habitats.
12. After the tragic event the nation _____ the loss of many lives.
13. The discovery of penicillin was a significant _____ in medicine.
14. Two-factor _____ adds an extra layer of security to the login process.
15. For dinner he was _____ for the vegetarian option on the menu.
16. Companies invest in robust _____ measures to protect their data from cyber threats.
17. The philosopher's words had a _____ impact on the audience making them contemplate life.
18. The _____ of the two companies created a corporate giant in the industry.
19. The study of fossils and ancient life forms is known as _____.
20. The sun's outer layer is characterized by plasma _____ that shoot out from the



surface.

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

21. Uncovering the behind the glamorous facade was a shocking revelation.
22. In a transparent organization there is a culture of at all levels.
23. Astronomers observed the cluster using powerful telescopes.
24. The contains thousands of stars bound together by gravity.
25. The key scientific paved the way for new possibilities in technology.
26. Biologists study the of species over millions of years.
27. The new policy sparked a debate among the stakeholders.
28. She was for a remote work setup to balance her personal and professional life.
29. The leaked confidential information about the upcoming product launch.
30. The company hired experts to assess their vulnerabilities and enhance protection.

Answer

Multiple Choice: 1. Iconic 2. Evolution 3. Organic 4. Glitz 5. Controversial 6. Stagnation 7. Delay
8. Administrator 9. Evidence 10. Parameters

Gap-Fill: 11. environmental 12. mourns 13. breakthrough 14. authentication 15. opting 16. cybersecurity
17. profound 18. merger 19. paleontology 20. spicules

Matching sentence: 1. darker truth 2. accountability 3. NGC 2005 4. globular cluster 5. breakthrough 6.
evolution 7. controversial 8. opting 9. insider 10. cybersecurity

CATEGORY

1. Sci/Tech - LEVEL3

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