



Giant Radio Galaxy: Home to 30 Milky Ways

Description

Giant radio galaxies are very big structures in space that can stretch for millions of light-years, making them some of the largest things we know about in the universe.

It's hard to find giant radio galaxies, even though they are so huge. But astronomers using the MeerKAT telescope in South Africa recently discovered a very big and strange one.

This new galaxy is over 3 million light-years long, with huge jets shooting hot plasma into space. It's more than 30 times bigger than our Milky Way galaxy.

The galaxy is called "Inkathazo," which means "trouble" in languages from Southern Africa. It's puzzling because its plasma jets are bent and it's growing in a crowded galaxy cluster where it shouldn't be able to get so big.

Scientists are using advanced tools to study Inkathazo's strange features and learn more about how it's evolving in its unique environment.

Discoveries like Inkathazo are helping us understand more about these giant radio galaxies and the mysteries of the universe.

The study about Inkathazo was published in the Monthly Notices of the Royal Astronomical Society.

Vocabulary List:

1. **Astronomers** /ə'strɒ.nə.məz/ (noun): Scientists who study celestial bodies and the universe.
2. **Galaxy** /'gæl.ə.ksi/ (noun): A large system of stars gas and dust bound together by gravity.
3. **Plasma** /'plæz.mə/ (noun): A state of matter consisting of ionized gas; a collection of charged particles.
4. **Evolving** /ɪ'vɒl.vɪŋ/ (verb): Developing gradually especially from a simple to a more complex form.
5. **Puzzling** /'pʌz.lɪŋ/ (adjective): Causing confusion or difficulty in understanding.
6. **Discoveries** /dɪs'kʌv.ər.ɪz/ (noun): The act of finding or learning something for the first time.

Comprehension Questions



Multiple Choice

1. What are giant radio galaxies?
 - Option: Very small structures in space
 - Option: Structures that can stretch for millions of light-years
 - Option: Objects found only in the Milky Way galaxy
 - Option: Unidentified flying objects

2. How big is the new galaxy discovered by astronomers?
 - Option: Over 1 million light-years long
 - Option: Over 2 million light-years long
 - Option: Over 3 million light-years long
 - Option: Over 4 million light-years long

3. What does "Inkathazo" mean in languages from Southern Africa?
 - Option: Peace
 - Option: Trouble
 - Option: Beauty
 - Option: Harmony

4. What is puzzling about the galaxy "Inkathazo"?
 - Option: Its small size
 - Option: Its location in space
 - Option: The straight plasma jets
 - Option: The bent plasma jets

5. Where did astronomers use the MeerKAT telescope to discover the new galaxy?
 - Option: United States
 - Option: South Africa
 - Option: Australia
 - Option: China

6. What is the new galaxy "Inkathazo" growing in?
 - Option: Isolation
 - Option: A crowded galaxy cluster
 - Option: A black hole
 - Option: Empty space



True-False

- 7. Giant radio galaxies are small structures in space.
- 8. Astronomers discovered Inkathazo using the Hubble Space Telescope.
- 9. The plasma jets of Inkathazo are straight.
- 10. Inkathazo is more than 30 times bigger than the Milky Way galaxy.
- 11. The study about Inkathazo was published in the Journal of Medical Science.
- 12. Inkathazo is not evolving in its unique environment.

Gap-Fill

- 13. Inkathazo is over _____ million light-years long.
- 14. The galaxy "Inkathazo" means " _____ " in languages from Southern Africa.
- 15. Scientists are using advanced tools to study Inkathazo's _____ features.
- 16. Inkathazo is growing in a crowded galaxy cluster where it shouldn't be able to get so _____ .
- 17. Giant radio galaxies are some of the largest things we know about in the _____ .
- 18. Inkathazo's plasma jets are _____ , adding to the puzzling nature of the galaxy.

Answer

Multiple Choice: 1. Structures that can stretch for millions of light-years 2. Over 3 million light-years long 3. Trouble 4. The bent plasma jets 5. South Africa 6. A crowded galaxy cluster

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

Gap-Fill: 13. 3 14. trouble 15. strange 16. big 17. universe 18. bent



Vocabulary quizzes

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

1. What are the structures that contain genetic information in a cell?
Option: Proteins
Option: Chromosomes
Option: Enzymes
Option: Lipids
2. Which term refers to planets that orbit stars outside our solar system?
Option: Galaxy
Option: Exoplanets
Option: Plasma
Option: Cephalopods
3. What term describes the variety of different species in an ecosystem?
Option: Predators
Option: Complex
Option: Diversity
Option: Intermuscular
4. What is the body's response to injury or infection characterized by redness and swelling?
Option: Symptoms
Option: Inflammation
Option: Resistance
Option: Ecosystem
5. What term refers to new findings or revelations?
Option: Discoveries
Option: Astronomers
Option: Solar Systems
Option: Researchers
6. Which term describes something from a long time ago?
Option: Evolved
Option: Ancient
Option: Puzzling
Option: Plasma
7. What term describes the gradual development or change of something over time?



- Option: Astronomers
- Option: Galaxy
- Option: Evolved
- Option: Ecosystem

8. Who are the individuals who conduct experiments and studies to advance knowledge in a particular field?

- Option: Paleontologists
- Option: Galaxy
- Option: Plasma
- Option: Researchers

9. What is the ability to withstand or oppose something?

- Option: Inflammation
- Option: Symptoms
- Option: Resistance
- Option: Evolving

10. Which term refers to animals that hunt and feed on other animals?

- Option: Intermuscular
- Option: Discover
- Option: Predators
- Option: Plasma

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

11. A collection of an organism's complete set of _____ is called a genome.

12. Patients should report any unusual _____ to their healthcare provider.

13. Scientists make careful _____ to collect data for their research.

14. Technology is constantly _____ to meet the changing needs of society.

15. The study results were _____ in a scientific journal.

16. The mysterious disappearance of the artifact left archaeologists _____ over its whereabouts.

17. Squid and octopus are examples of _____.



18. The fourth state of matter after solid liquid and gas is _____.
19. Our planetary system is an example of a _____.
20. _____ study celestial bodies like stars planets and galaxies.

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

21. Athletes focus on building strength in their muscles including those that are .
22. Scientists are always eager to new insights into the mysteries of the universe.
23. use powerful telescopes to observe and analyze distant celestial objects.
24. Our solar system is located in the Milky Way a vast collection of stars and planets.
25. The Amazon rainforest is home to a multitude of plant and animal species forming a complex .
26. study ancient life forms by examining fossils and geological records.
27. The coral reef ecosystem contains a wide of marine organisms in various shapes and colors.
28. Neural networks are powerful tools used to solve problems that traditional algorithms struggle with.
29. Researchers gain valuable into human behavior through psychology studies.
30. In the sun's core hydrogen undergoes fusion to form the hot ionized gas known as .

Answer

Multiple Choice: 1. Chromosomes 2. Exoplanets 3. Diversity 4. Inflammation 5. Discoveries 6. Ancient 7. Evolved 8. Researchers 9. Resistance 10. Predators

Gap-Fill: 11. Genomes 12. Symptoms 13. Observations 14. Evolving 15. Published 16. Puzzling 17. Cephalopods 18. Plasma 19. Solar Systems 20. Astronomers

Matching sentence: 1. Intermuscular 2. Discover 3. Astronomers 4. Galaxy 5. Ecosystem 6. Paleontologists 7. Diversity 8. Complex 9. Insights 10. Plasma

CATEGORY

1. Health - LEVEL2

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Author

aimeeyoung99

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