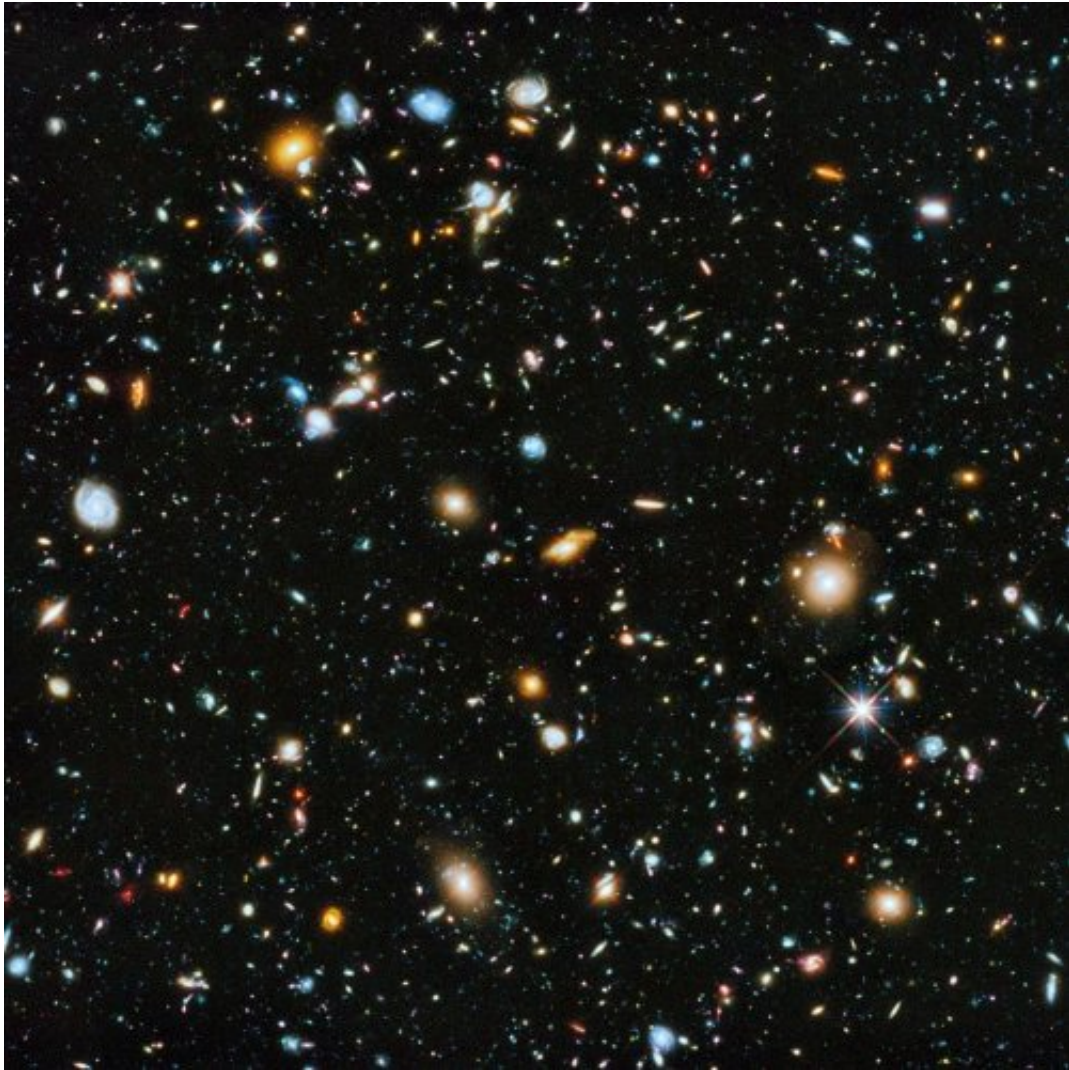


Big Bang Quiz: questions and answers



1. According to the Big Bang theory, the universe has expanded from _____

- a very high-density and low-temperature state
- a very high-density and high-temperature state
- a very low-density and high-temperature state

2. How long ago has the Big Bang happen?

- 13.799 ± 0.021 billion years
- 11.799 ± 0.021 billion years
- 15.799 ± 0.021 billion years

3. Who was the first to note that an expanding universe could be traced back in time to an originating single point?

- Georges Lemaître
- Aristotle
- Arthur Eddington

4. What were the majority of atoms produced by the Big Bang?

- Oxygen, along with cyanide and traces of silicon
- Hydrogen, along with helium and traces of lithium
- Oxygen, along with helium and traces of lithium

5. Who formulated the governing equations of the Big Bang theory?

- Albert Einstein
- Edwin Hubble

Alexander Friedmann

6. What is a gravitational singularity?

- A location in spacetime where the gravitational field of a celestial body becomes infinite in a way that depends on the coordinate system
- A location in spacetime where the gravitational field of a celestial body becomes finite in a way that does not depend on the coordinate system
- A location in spacetime where the gravitational field of a celestial body becomes infinite in a way that does not depend on the coordinate system

7. How many types of quarks are there?

- 4
- 6
- 5

8. What percentage of the total energy density is present in the form of dark energy?

- 73%
- 37%
- 63%

9. What does WMAP stand for?

- Watkins Microwave Anisotropy Probe
- Williamson Microwave Anisotropy Probe
- Wilkinson Microwave Anisotropy Probe

10. When did Arno Penzias and Robert Wilson discover the cosmic background radiation?

- 1954
- 1974
- 1964

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Right answers

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