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CAREER PLANNING COMPANION FOR
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About the Magazine

ENTECH is a magazine that comes out every month. It is for teenagers between the ages of 13 and 18. The magazine focuses on Science, Technology, Engineering, and Mathematics (STEM). It helps teens find out what they are interested in and what they love. ENTECH shows them how to turn their passion into a career. The magazine has short articles. These are written by professionals, innovators, researchers, and teachers.

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From the desk of Editor

New Study Challenges Existence of Dark Matter

A new study published in the Astrophysical Journal has shaken up the world of astrophysics. The study, conducted by University of Ottawa physics professor Rajendra Gupta, challenges the widely accepted belief in the existence of dark matter.

For decades, scientists have theorized that dark matter makes up 26% of the universe. It is believed to be a mysterious substance that does not interact with light or electromagnetic fields, but exerts gravitational force. However, Gupta's research suggests that dark matter may not exist at all.

Gupta's theory is based on his previous work which proposed that the universe is actually 26.7 billion years old, twice as old as current models suggest. Building on this theory, Gupta argues that dark matter is not necessary to explain the accelerating expansion of the universe.

This goes against prevailing theories which suggest that dark energy, another mysterious substance making up 68% of the universe's total energy, is responsible for this expansion. Dark matter, on the other hand, is thought to make up most of the mass in galaxies and determine their organization.

In standard cosmology, dark energy causes the accelerated expansion of the universe, explained Gupta. However, it is due to the weakening forces of nature as it expands, not dark energy.

Gupta's theory proposes a different explanation for this accelerated expansion. He combines Swiss physicist Fritz Zwicky's tired light hypothesis, which suggests that red light from distant celestial objects is the result of energy being lost, with a new covarying coupling constant. This constant suggests that the forces of nature weaken over time.

This study raises many questions and challenges long-held beliefs in astrophysics. Only time and further research will tell if Gupta's theory holds up against scrutiny. But for now, it's clear that this controversial paper has sparked a heated debate in the scientific community.

Charudatta Pathak

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