

Neutrinos

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Neutrinos Latest News

Chinese scientists recently placed special detectors deep in the South China Sea to explore the possibility of building a huge underwater observatory to find neutrinos.

About Neutrinos

- Neutrinos are **nearly massless, electrically neutral subatomic particles** that **interact extremely weakly with matter**.
- Their tendency not to interact very often with other particles **makes detecting neutrinos very difficult**.
- **First predicted in 1930**, they weren't discovered in experiments until 1956, and scientists thought they were massless until even later.
- They **belong to the family of particles called leptons**, which are **not subject to the strong force**.
- Rather, neutrinos are **subject to the weak force** that underlies certain processes of radioactive decay.
- **Source:** Neutrinos come from all kinds of different sources and are often the **product of heavy particles turning into lighter ones**, a process **called "decay."**

- They are the **most common particles in the universe**.
- Approximately 100 trillion neutrinos pass completely harmlessly through your body every second.
- Neutrinos play crucial roles in the standard model of particle physics, in stellar physics and black holes, and even in cosmology and the nature of the Big Bang.

Neutrinos FAQs

Q1. Why is neutrino called a ghost particle?

Ans. Neutrinos earned the nickname “ghost particles” because they can pass through vast amounts of matter undetected, interact very weakly with other particles, and are extremely hard to observe.

Q2. Are there 3 types of neutrinos?

Ans. Scientists named the three types of neutrinos they have discovered so far for the other matter particle they interact with: the electron neutrino, muon neutrino, and tau neutrino

Q3. What is the smallest particle known to man?

Ans. The smallest particle known to man is the quark.

Source: IE

Source: <https://vajiramandravi.com/current-affairs/what-are-neutrinos/>

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