

Dark Stars

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Dark Stars Latest News

Astronomers recently unearthed evidence that some of the earliest luminous objects in the universe may be “dark stars”, stars powered not by nuclear fusion but by dark matter annihilation.

About Dark Stars

- Dark stars are **hypothetical objects** that **may have inhabited the early universe**.
- Scientists believe that dark stars **might be the oldest stars in the history of the universe** and may represent the **first phase of stellar evolution**.
- These stars are **giant, much larger than our sun** or any of the other stars around today.
- A single dark star could be as much as **400 to 200,000 times wider than our sun** and **500 to 1,000 times more massive**.
- Dark stars **aren't actually dark**; they just **don't emit any visible light**.
- That's **because instead of nuclear fusion**, which is the process that converts hydrogen into helium in the core of an ordinary star, **dark stars are powered differently**.

- Astronomers believe that **dark matter heating is what powers them.**
- Because there's **no fusion** happening inside them, **they aren't very hot.**
- **Because dark stars don't rely on core fusion to stave off gravitational collapse, they're not extremely compressed** like normal stars.
- Instead, dark stars are likely **giant, puffy clouds** that **shine extremely bright.**
- **A single dark star** from the early Universe **could be as bright as an early galaxy containing many more standard stars.**
- And even though they'd be massive — and potentially spewing gamma rays, neutrinos, and antimatter — so far, they've been **too faint to be detected because they don't emit visible light.**

Source: TH

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