

Ranking all alternatives to black holes

Hello Mortals.

Black holes are among the most successful predictions in modern physics.

Which is unfortunate.

Because physicists keep inventing alternatives.

For decades, scientists have stared into the darkest objects in the universe and asked a simple question:

"What if that's not a black hole?"

Today we'll rank the leading black hole alternatives from "surprisingly plausible" to "please stop giving theorists free time."

S-tier means the universe might actually work this way.

D-tier means a physicist wrote this on a napkin during a very bad week.

Some of these are serious attempts to solve real problems in physics.

Others sound like someone lost a bet with general relativity.

We'll be ranking them based on two criteria:

- How likely they are to be real.
- And how entertaining the resulting existential crisis would be.

From gravastars to fuzzballs to objects that have absolutely no business existing, these are the contenders competing for the title of "thing that is probably not a black hole."

The winner gets the honor of rewriting everything we know about the universe.

The loser remains a black hole.

Which, statistically speaking, is still the safest bet.

Unfortunately, statistics have never stopped physicists before.