

# All You Need To Know About Black Hole

by Elaine Vanessa - Sunday, February 23, 2020

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Believe it or not, black holes are some of the mysterious and bizarre things in our galaxy. They are almost [1 billion](#) in numbers and According to the simplest definition; it is a region in space which is awfully dense. Its sheer force of [gravitation](#) force is so strong that whatever it pulls cannot escape (not even light).

Anyone who reaches the boundary of the black hole, also known as the 'event horizon', helplessly coils toward an unknown fate and haven't return till date. Despite large-scale researches, a large part of these monstrous cosmological marvels remains masked and unexplored.

Black holes are still blowing the minds of physicists and scientists with ongoing discoveries. Here are eight mind-blowing scientific facts and theories about black holes we believe you should know.

## Surprising Facts and Theories about Black Hole to Blow Your Mind

- **They aren't discovered by Einstein**

A lot of people still believed that black holes are the discovery of Einstein. The [theory of relativity](#) predicts the black hole formation, but Einstein did not discover their existence. German astronomer Karl Schwarzschild used the Einstein equation to prove that black holes could undoubtedly form.

- **They are Dark and Dense**

They can be big or small, but human eyes cannot see them. The gravitational magnetism is so strong that all the light is pulled into the middle of the hole, making them dark and deadly. However, recent theories

argue that the perfect stellar black holes aren't truly black. They emit a combination of radiations made up of all the objects that fell into them.

- **How Do They Look Like**

It might sound crazy, but experts say, 'it feels like we are standing in front of the gates of hell'. The bright coloured disk looks identically circular. The images surfaced over the internet validate the theories we heard about black holes a long time ago. [Black hole looks like dark spheres](#) surrounded by dark and glowing rings. They have three layers: outer event horizon, inner event horizon, and central singularity. Anything that goes nearer to the event horizon is burnt before even they reached the singularity.

- **Capturing the Uncapturable: You Can See it!**

Against such dusky backdrops, capturing the black hole is near to impossible. But the groundbreaking latest theory of Stephen Hawking declared that the gigantic masses emit electromagnetic radiations forming an orbiting disk, but their gravity pulls it back into its core. Scientists captured the first image of a black hole using the technique to image far-away objects. Very Long Baseline Interferometry or VLBI technique allows synchronization of numerous smaller telescopes focusing on the same object.

- **Mass Of A Supermassive Black Hole**

To calculate their mass, you need to compute the motion of the stars that revolves in the middle of the galaxy. These motions suggest a cluster of dark matter whose weight can be calculated by computing the speed of the stars. Anything that falls into a black hole becomes a portion of the overall mass of the black hole.

- **They Cannot Eat The Entire Galaxy**

Many experts assume that the colossal masses will eat the entire Universe one day, but no theories have been proposed. The rings glow thousands of times more deeply than the whole galaxy because of the

gases it sucks daily. The gravitational force contained in the center of the hole is large, but not enough to eat the entire Universe. High-quality research papers published by the most trusted site [Academist Help](#) contains the latest facts regarding the growth of black holes.

- **They are Star-Destroying**

Yes, it's true that black holes habitually eat stars around them and anything that comes in their way. Reports tell that the enormous black holes can tear down stars similar to the size of the sun with no trouble. Astronomers observe a huge star being sucked into the gravitational field of the black hole and break apart into a stream of gas. However, the rest forms a swing around the black hole and forms a disc.

- **What If You Fell Into A Black Hole**

Like black holes itself, [the fate of a person falling](#) into it, is also strange. Every person who studies black holes must have asked themselves where I would go if I fell into a black hole? Here's the answer. It is expected that you might get crushed or burnt and die instantly. But the reality is much strange.

According to Einstein, gravity warps space-time, instigating it to curve. They are so dense that space looks curvy, and as we go deeper into the holes, they are perfectly infinitely curved at the center. As you move toward the hole, you will look stretched and twisted like spaghetti, as if someone is viewing you through a magnifying glass. That's terrifying!

### **Conclusion**

Studying strange structures in the space provide insights into physics and allow us to test theories and methods. Even after so much exploration, there is a lot more to explore. Be sure to stay tuned for the next exciting facts about the black holes as they are still the most mysterious thing yet to be explored fully.

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