

# *The Mystery of Black Holes*

by Joshua Peters

What if you were sucked into a black hole? What would happen to you and where would you go? I think black holes are one of the greatest mysteries in our universe!

## Discovering Black Holes

Black holes can't really be "discovered" because you can't see them. You can only see their effect on surroundings. People have been thinking about what might be black holes for hundreds of years.

Albert Einstein wrote theories about black holes and published a book in 1916. Karl Schwarzschild did the first real study about black holes and his work led to a theory about them.

Black holes are really hard to find because they are invisible. What scientists *do* see is something called the gravitation effect – stars circling around the black hole very quickly. When something is about to be sucked into the black hole scientists can see radiation.

We don't really know for sure how many black holes exist. They may be at the center of all galaxies and there are billions of those. I

think the number of black holes discovered so far is like *one* bolt on the Columbia Star, an enormous ship in the Soo Locks.

### How Black Holes Work

A black hole is what remains after a massive star dies. The core has such strong gravity that it sucks in all matter and won't let any light escape.

Matter falls into the black hole and disappears from our universe. Then the black hole tears the molecules into atoms. The atoms are broken into smaller pieces called subatomic components. These get stretched and squeezed until they become a part of the black hole. Then the radius of the black hole increases.

### Black Holes & Us

Our sun is too small to become a black hole. Instead it will shed its outer layers and become a white dwarf.

Scientists think that our galaxy has a black hole in the center because they have observed stars and gases moving around something very quickly. This movement can only be explained by a black hole.

## Conclusion

Do you still think that black holes are one of the greatest mysteries in our universe? I hope you learned more about black holes from what you've just read. Your brain now has more information, and if your head hurts after reading this essay that means you're getting smarter in science!

## Bibliography

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