

Film Title and Release Date: *NOVA: Black Hole Apocalypse* (2018)

Film Length: 113 minutes

Film Genre: Science

Reviewer Name and Grade: Alexander S., 8th Grade

Date Reviewed: March 26, 2021

This film, *NOVA: Black Hole Apocalypse*, is a documentary on black holes, what they are made of, how we found them, and much more. It tells the story of black holes in chronological order, starting with Albert Einstein and his theory of relativity, and eventually growing to LIGO and the James Webb Telescope. It discusses what it's like in a black hole, what they look like, and its accretion disk. The film also brings in some special guests throughout the film, such as priyamvada natarajan and bill degrassie tyson

Right before WW2, we began finding x-rays being blasted from deep space. One scientist found one star called Cygnus X-1 orbiting a mass, and found the mass it was orbiting was 15 solar masses, a black hole. The next mystery discussed is Quasars, things that were emitting radio energy. By analyzing this energy, we found quasars were super fast and bright. Quasars had to be an extremely large black hole. Now called super massive black holes, could they be in our galaxy? By observing stars in the center of our galaxy, we find that there is a massive super massive black hole in the center of our galaxy. With the new hubble telescope, we map new galaxies only to find they all have super massives. Now astronomers ask the question: how did they get so big? No black hole could eat enough giving the amount of time the universe has existed. One answer is making a black hole directly from a cloud of gas. Another is black holes eating black holes. Finally, that is how much we know about black holes.

How did you find the film on Kanopy?

I went to Browse, Science, Astronomy and Aeronautics, and it was the second option in most popular.

Did the presentation of information keep you interested?

The presentation was at the perfect pace, made sure the viewer was engaged with visual effects of the black hole; interviews with astrologists to have a more precise and accurate answer; and overall stunning graphics.

Was the pace of the film too fast, too slow, or just right?

The pace of the film was just right, the narrator talked slowly so viewers could understand and comprehend what she was saying, but not too slow so that the viewers would have to wait.

What grade levels is this film appropriate for?

This film is appropriate for middle and high school students, where it talks about subjects like radio waves and gravitational pull, which may not have been taught to elementary schools students before.

Rating:

5 stars: I'm really glad I watched this film; it was awesome!

This film was fantastically made, with quality graphics, visual effects, very thorough and well spoken, and overall just a really great film!