



Article Guide: Black holes, general relativity and gravitational waves – My interview with Andy Bohn, Astrophysicist

<http://scienceovereverything.com/2016/10/20/andy-bohn-gravitational-waves-interview/>

As you read each paragraph:

- Vocabulary – Box vocabulary words or words that you have not seen before
- Focus Questions – Underline in the text where these questions are as you read

Introduction:

1. What are gravity waves and who predicted their existence?

General relativity and black holes

2. How did Albert Einstein describe how mass influences spacetime? How is this related to gravity?

3. How are black holes formed?

Gravity Waves

4. What event caused the gravity waves detected by the LIGO experiment? How much energy was released?

5. How is LIGO able to detect gravity waves?

6. How does LIGO keep vibrations caused by earthquakes and human activity from interfering with data collection?

Discussion

The discovery of gravity waves marks a brand-new way to look at the universe. Being able to detect ripples in spacetime will allow scientists to observe data like never before. How do you think researchers could use this to better humanity? What kinds of technology applications could be developed?

Vocabulary Guide

General Relativity	
Medium	
Spacetime	
Black hole	
Event horizon	
Gravity	
Nuclear fusion	
Gravitational waves	
Frequency	
Pendulum	