

Black holes, white holes & Wormholes

Introduction of topic

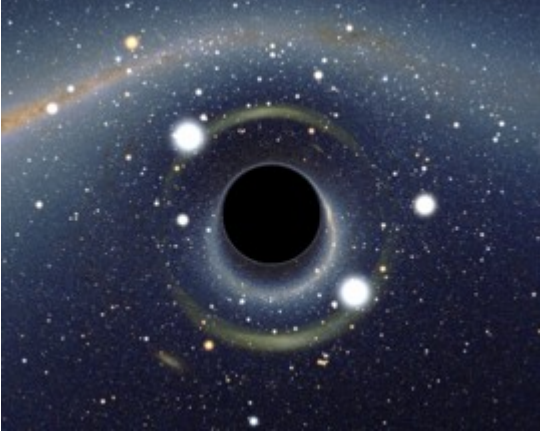
The theory of black holes has been proven due to the use of radio waves to detect them. The black hole is a distortion of the space-time continuum that appears when a star explodes at a supernova scale and its remnants form to become neutron stars and black holes. The gravity pull on a black hole is so powerful that even a sun thousands times its mass couldn't withstand it. Also not even light that shines into its path shows on the other side of the black hole. There is the spaghettification effect that it has the objects that fall in, (gravity stretches them apart) Several other theories have popped up relating to black holes. One is the wormhole which is said to be some sort of tunnel leading to another part of space or possibly another universe. A theory that supports the wormhole theory is the white hole. The white hole is said to be the opposite to the black hole, spitting out matter rather than eating it up. The black hole is connected to the white hole. The tunnel connecting the two is the wormhole.

History and discoveries of the topics

When black holes were first introduced through theories of both Einstein and Newtons equations of gravity. The theory involved gravity and a gravitational collapse, which leaves the black holes powerful gravitational pull in question. Eventually astronomers were able to detect the black holes through radio waves and capturing an image of one using telescopes that measure light at great distances. The wormhole theory followed soon and people have been working on finding out whether or not it exists. The white hole is a topic that isn't that well known to the public. Its theory gives off excitement that an object that emits matter would exist. In terms of quantum physics white holes are basically the same as black holes. White holes and black holes can't exist within a too close radius to instability of the matter surrounding it, theories say that the wormhole tunnel leads to either a different galaxy, part of space or even a different universe. How the wormhole is stable or even suitable for space travel for humans is not yet known due to no real evidence of their existence. The white hole spitting out matter could also be what is causing the universe to infinitely expand. They could also be invisible like the black holes and can't be detected through the use of radio waves. If the white holes do spit out matter, then how can we notice? Does the galaxies just move along in rotation while ignoring increases in matter amounts around us?

Evolving of the topic

The topic of black holes has led to new discoveries such as Stephen Hawking's discovery that the black hole event horizon of a black hole will never decrease. The discovery of the black hole includes capturing an image of one. The accretion disk surrounding the black hole.



The discovery of black holes in our galaxy have been confirmed. A new discovery are the micro black holes that are created under a particle accelerator. The theory of wormholes and white holes have no solid evidence to support their existence. The only way to find out if they exist inside and through the black hole is to send a probe or crew inside although they could die due to the strength of the gravitational forces or the instability of the matter on the inside. Even if they make it through and enter a wormhole and go through a white hole we have no communication with them due to distance or black hole affect. Whether or not in future they build a telescope that contains the technology to detect wormholes and white holes.

Supporting evidence

The black hole has already been discovered by use of both measuring radio waves and heat increases in the area and visualising to spot the black holes. For example in 1971 the first black hole was identified by the American Uhuru satellite called Cygnus X-1. Any black hole can be detected when a star gets close enough and we have visual of it tearing the star apart.

There is a theory on building some sort of artificial black hole which has an anti-gravity substance attached that allows for space travel. Scientists have been unable to proceed with the experiment due to insufficient technology for the experiment requirements. No solid evidence has been uncovered that will confirm the existence of a white hole or wormhole.

Other theories

The entire concept of wormholes and white holes are theories. They do have counter theories that oppose their existence. Steven Hawking argued that white holes are truly just black holes when quantum physics is applied. The theories that counter the existence of the wormhole are saying that due to physics law that the matter surrounding the wormhole could not exist due to the black hole continuously sucking in matter and the fact that the wormhole would be completely unstable. The white hole spitting out matter is hard to believe since the fact stands about where the matter will come from and how it traveled to the white hole.

The future

The future will most likely have much better technology available. The possibility of discovering the existence of wormholes and white holes will be much more closer due to improved technology and a better understanding of the universe. The possibility of building some sort of device that allows us to defy the strong gravity fields of a black hole or even create a artificial black hole without a strong gravity field. The creation of a telescope that allows us to measure matter inside a black hole without getting close. All of these can potentially be achieved when man starts to build the sufficient technology that expands our laws of physics.