Detecting monstrous black holes, 20 billion times larger than the sun and growing 'fast'

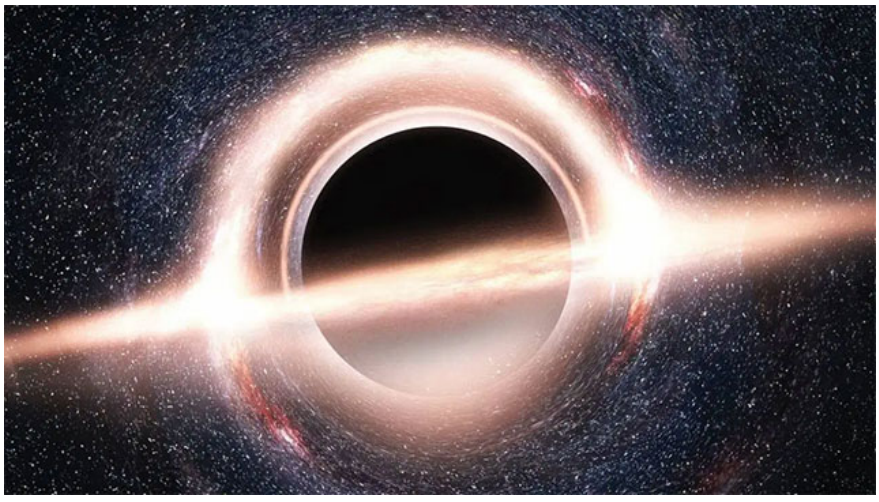
Astronomers specializing in 'tracing' black holes in billions of light-years' space have accidentally discovered a black hole that is perhaps the most anomalest ever, with the ability to grow fastest and emit The strongest brightest out of all the cases ever recorded.

This supermassive black hole was observed when it appeared about 12 billion light years ago, has an estimated size of 20 billion suns - and is extremely 'starving'.

According to scientists' estimates, black holes are growing at an unusually fast rate. This 'voracious monster' grows 1% every 1 million years, devouring gas, dust, stars and any other celestial body the same size and mass as our sun. two days.

"This black hole is growing so fast that it emits a thousand times more light than a typical galaxy. This is because the amount of matter it absorbs on a daily basis causes a lot of killing and killing. heat, "said Dr. Christian Wolf, team member.

The light emitted from these supermassive black holes, also known as quasars, is so bright that if it were at the center of our galaxy (the Milky Way), it would be 10 times brighter than full moon day and almost completely eclipses the light emitted by other stars in the sky. Of course life on Earth will also perish because of the enormous amount of X-rays emitted from it.



The premise for future discoveries

Known as QSO SMSS J215728.21-360215.1 (J2157-3602 for short), this giant black hole was discovered using data collected by Gaia satellite of the European Space Agency. Europe (ESA), the NASA Wide Field Infrared Expeditioner (WISE), and the ANU SkyMapper Telescope.

Unlike other giant quasars that have been discovered previously, researchers are still unable to fully understand how this quasar can grow surprisingly large in such a short time period.

According to Dr. Wolf, the average black hole is about the size of 50 suns. In the case of J2157-3602, however, based on the current rate of growth of this singular black hole, he assumed that it had had a mass almost 5,000 suns since its birth.

In fact, cases of extremely hungry supermassive black holes are rarely discovered. Therefore, researchers hope that in the future, data collected from J2157-3602 will help humanity continue to discover other 'giant monsters with bottomless stomachs' lurking. in the universe.