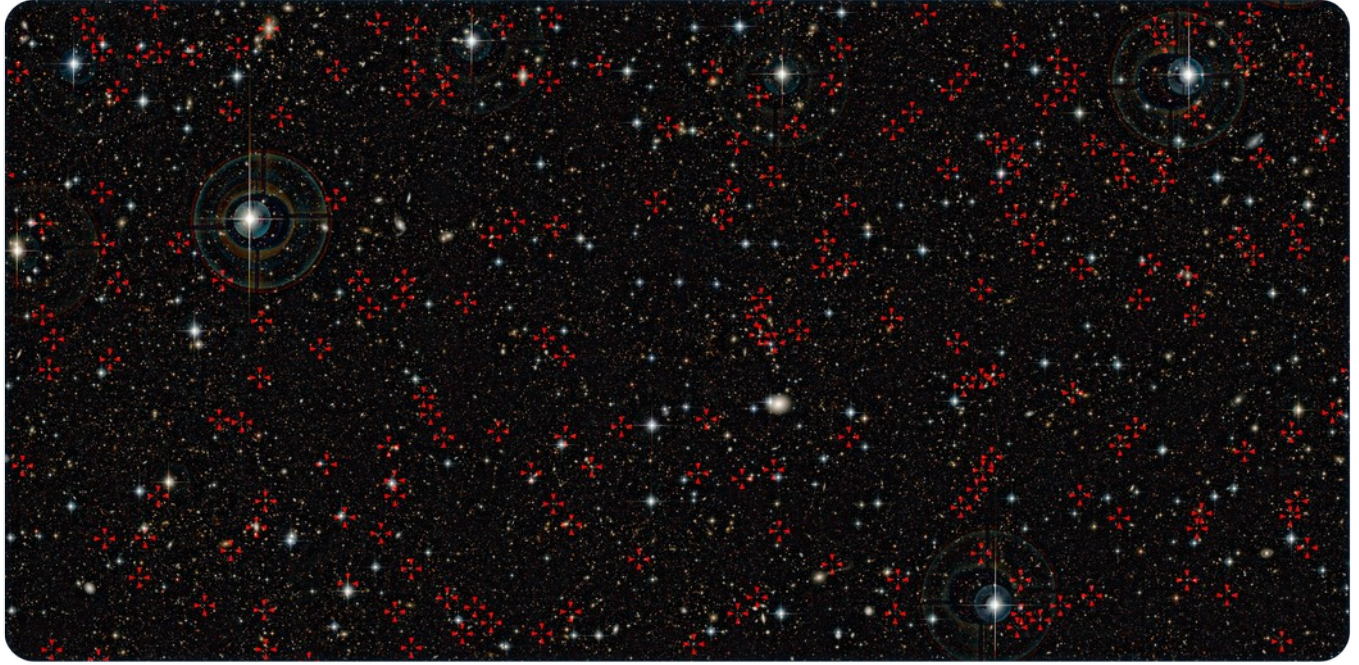




The Scariest Space Monsters Live in the Biggest Galaxies



There are monsters lurking in space, which are called Black Holes. Anything that gets too close to a Black Hole is pulled to it with such a strong force that it has no chance of escape. The monster will gobble it up!

Even light – the fastest thing in the Universe – is doomed if it goes near one of these monsters. This is why Black Holes are black. However, they are not really holes and they are not empty. Black Holes are actually filled with a lot of material that is crammed into an extremely small region.

Astronomers know that some Black Holes are giants and that they live in the centres of most galaxies – including our own galaxy, the Milky Way! These giant monsters are called 'Super-massive Black Holes'. Don't panic: The Earth and the rest of our Solar System is far enough away that they are not in any danger from our galaxy's Super-massive Black Hole.

Some of the Super-massive Black Holes don't have any material nearby to eat. But others have a buffet table of cosmic goodies within reach. The Super-massive Black Holes that are currently eating are easier to find in the Universe, as the doomed space material shines brightly before it disappears forever into the monster's mouth. Some galaxies that contain this type of Super-massive Black Hole are marked with red crosses in the picture above.

Astronomers had expected to find most of the monsters that are currently feeding at the centres of medium-size galaxies. However, new observations have shown that they are mostly in the centres of galaxies that are 20 times bigger than what they had expected.

This surprising discovery means that astronomers might have to go back to the blackboard and figure out why their prediction was wrong. Sometimes, even astronomers don't get the answer right first time!

COOL FACT

To make a small Black Hole you would have to squash something with the same mass as the Earth into a tiny ball that is only a few millimetres wide!



More information about EU-UNAWE
Space Scoop: www.unawe.org/kids/