

SPACE SCOOP
NEWS FROM ACROSS THE UNIVERSE



Monster Galaxy Shows Us Another Side of Itself

Feb. 20, 2013

This looks like a picture of the powerful, planet-destroying laser beam from Star Wars or something else straight out of a sci-fi film, and it almost could be! What we're looking at is the centre of one of the most active galaxies in the Universe. Galaxy centres like this spew incredible amounts of energy – they are brighter than about 100 normal galaxies combined!

Although this picture is an artist's impression and not a real photograph, it is based on the first real 3-D observations of a quasar – this is what astronomers call these active galaxy centres! Seeing an astronomical object in 3D is no easy task. Unless the object is rotating, it is very difficult to see from more than one angle. But an unlikely hero came to our rescue in this case: an enormous cluster of galaxies lying between Earth and the quasar.

It sounds odd, but instead of blocking out the view of the quasar, the gravitational pull of the galaxy cluster was so strong that it bent the beams of light coming from the quasar as it travelled past. Because of this, the light travelled around the cluster and we were able to observe the quasar from Earth. Even better, the cluster bent the light so that we could see light coming from different sides of the quasar at once! This gave astronomers the first ever 3-D view of one of these monster galaxies!

▲ COOL FACT!

The Universe is made up of various structures held together by gravity. Stars are collected together into galaxies and galaxies are collected together into galaxy clusters. Our galaxy, the Milky Way, is part of the Virgo Cluster along with about 2000 other galaxies!