

Cosmic Magnifying Glass Spots the Furthest Star Ever

April 17, 2018



Astronomers have just found the most distant and ancient star ever seen!

Archaeologists are best known for digging up dinosaur bones and delving into ancient tombs, so what do they have in common with astronomers? Both astronomers and archaeologists look at ancient relics to help us understand the past.

Astronomers don't need to dig deep underground to look back in time, they can just look at distant objects in space. That's because when we look at objects in the night sky, we are already <u>looking into the past</u>.

Nothing in the Universe can cross space instantly, not even light. Light from distant stars or galaxies can take <u>billions</u> of years to travel to Earth. So when we look at them, we are actually seeing what these objects looked like billions of years ago, when the light started its journey.

The record breaking star is more than nine billion light years away, this means we're seeing it as it was nine billion years ago! Back then the Universe was very young, only a third of its current age.

Making out individual stars in the Universe is usually impossible, but in a spot of luck this star was magnified 2,000 times. This made it visible to astronomers' telescopes.

Massive objects can bend the light from stars behind them with their strong gravity. Like a magnifying glass, this makes the star appear larger. The light of this star was magnified by two objects: a huge cluster of galaxies and a mystery object about three times the mass of the Sun.



The new star is over 100 times farther away than the second farthest star we can study.

This Space Scoop is based on a Press Release from <u>Hubble Space Telescope</u>. Hubble Space Telescope













This website was produced by funding from the European Community's Horizon 2020 Programme under grant agreement no 638653