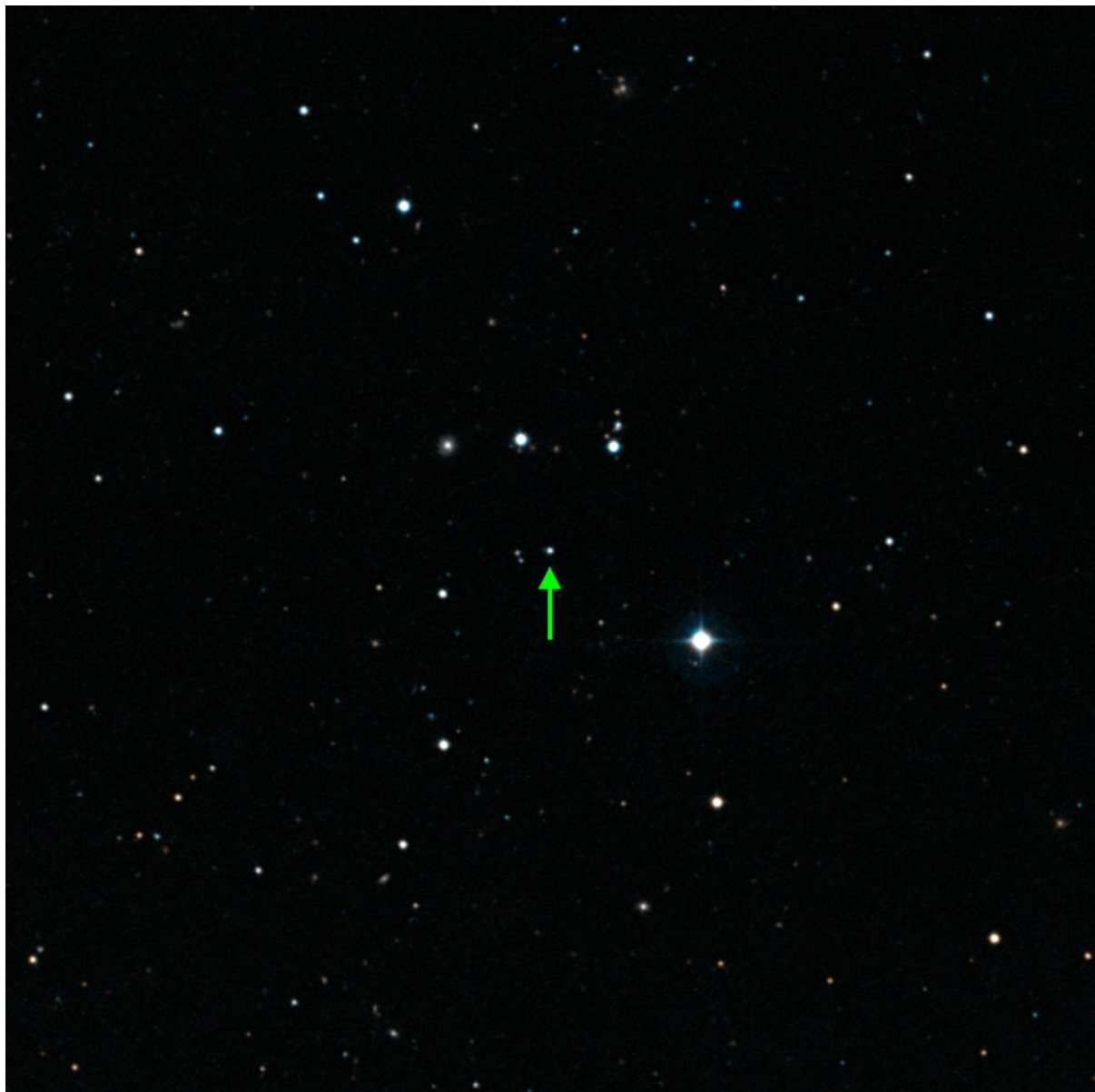




Mission Impossible: Observing a Star that Shouldn't Exist

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This photo shows many stars. But according to astronomers, the star that the arrow is pointing towards shouldn't be there – it should never have been born.

So what makes this fairly average looking star special? It comes down to what the star is made of. Stars are usually made from a wide selection of different types of tiny things called atoms, such as hydrogen, helium, carbon and oxygen. But astronomers recently discovered that the star shown here is made nearly entirely of only hydrogen and helium atoms. Such a star should be impossible, astronomers say.

Hydrogen and helium atoms formed shortly after the Universe began with the Big Bang. Most other atoms, such as carbon and gold, were made later, either inside stars or when stars explode.

Since this star only contains hydrogen and helium, astronomers think that it might have been born not long after the Big Bang. It might be about 13 billion years old! "It could be one of the oldest stars ever found," says Lorenzo Monaco, one of the astronomers who made the new discovery.

So, it's a supposedly 'impossible' star and it could be the oldest known star in the Universe. Take another look at the photo, and that tiny dot of light should look a lot more impressive now!

COOL FACT

Hydrogen is the most common type of atom in the Universe. More than 90% of the atoms in the entire Universe are hydrogen!

This Space Scoop is based on a Press Release from [ESO](#).

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