

SPACE SCOOP

DES NOUVELLES DES QUATRE COINS DE L'UNIVERS



Giant Cosmic Magnifying Glass Finds Baby Stars

27 août 2014

The famous fictional detective Sherlock Holmes always has his magnifying glass with him, ready to uncover a barely visible but crucial piece of evidence to solve the case.

Like Sherlock, astronomers also use lenses to improve our view of the world — they use telescopes.

But very occasionally, astronomers stumble across a cosmic phenomena that creates a natural, cosmic magnifying glass and boosts our vision. These special events allow us to look at distant objects that wouldn't be visible otherwise!

Albert Einstein first predicted that these cosmic magnifying glasses might exist. He said that light does not always travel in a straight line, but will bend around objects with extremely strong gravity – similar to the way the lens in a telescope bends and focuses light.

We now know that Einstein's prediction was correct. Massive structures, like galaxies and clusters of galaxies, can bend the light from objects behind with their strong gravity. This phenomena is called 'gravitational lensing'.

Thanks to a handy, galaxy-sized magnifying glass, and twelve telescopes, astronomers have been doing some Sherlock-style detective work. With their improved vision they have been gathering new information on an object with a weird shape that was hard to explain.

They found that it is the remains of a tremendous collision that happened a long time ago between two galaxies. As these galaxies continue to crash and merge together before your eyes, the shock waves from the impact are sparking a frenzy of new star birth! You can see it in this photograph!

▲ COOL FACT!

If you're wondering why the picture is so blurry, it's because these galaxies are really, really far away. This galactic collision happened 7 billion years ago, when the Universe was just half the age it is today and since then the light from the galaxies has been travelling through space to make this picture!