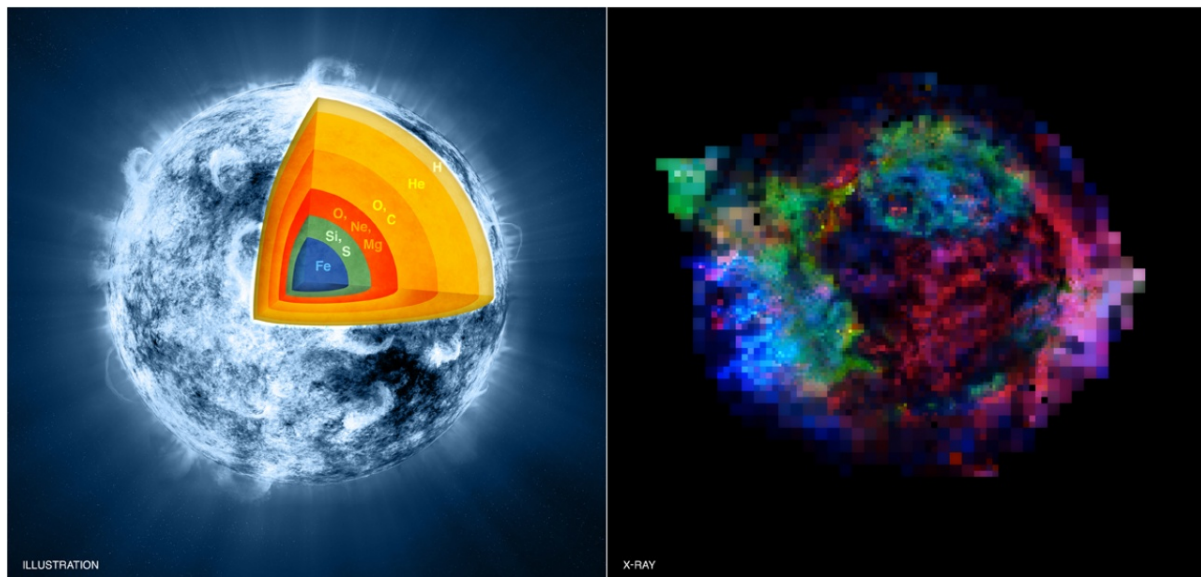




A Star Turned Inside Out!

April 2, 2012



These pictures show a star before and after it has had a radical makeover. The 'before' picture on the left is an artist's drawing of where the different ingredients inside a massive star used to be found. These ingredients are called chemical elements. On the right, the 'after' picture is a real space photo of the same star after a massive explosion blew away the star's outer parts.

Astronomers call an explosion like this a supernova and all of the star material after the explosion is called a supernova remnant. The supernova remnant shown here (in the photo on the right) is called Cassiopeia A, or just Cas A for short.

In both pictures the same colours have been used to show the different chemical elements in the star. Before the explosion, astronomers think that the star had lots of the chemical element iron (shown in blue) and sulphur and silicon (shown in green) at its centre. But afterwards, these chemical elements were flung towards the outer edges of the star, as shown by the blue and green colours around the outer parts of Cas A in the photo on the right. Basically, the star has turned inside out!

 **COOL FACT**

Except for objects in our Solar System, Cas A is the most powerful radio station in the night sky, emitting lots of radio signals!

This Space Scoop is based on a Press Release from [Chandra X-ray Observatory](#).
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