

Butterfly emerges from stellar death in planetary nebula

A dying star that was once five times the mass of the Sun created this delicate butterfly shape. Called the Butterfly Nebula, the object is an example of a planetary nebula, so-named because many of them have a round appearance resembling that of a planet when viewed through a small telescope.

The Hubble Space Telescope snapshot was one of the first images taken after the May 2009 servicing mission to upgrade the Earth-orbiting observatory.

The star formed the nebula by slowly ejecting its layer of gases over about 2,200 years. It is now unleashing a stream of ultraviolet radiation that is making the ejected material glow. The “butterfly” stretches for more than two light-years, which is about half the distance from the Sun to the nearest star, Alpha Centauri. The central star is hidden within a doughnut-shaped ring of dust, which appears as a dark band pinching the nebula in the center.

The Butterfly Nebula, catalogued as NGC 6302, lies within our Milky Way galaxy, roughly 3,800 light-years away in the constellation Scorpius.

For more information on Tactile Astronomy projects from the Space Telescope Science Institute in Baltimore, Maryland, go to the following page at the Web site, Amazing Space: <http://amazing-space.stsci.edu/tactile-astronomy>