

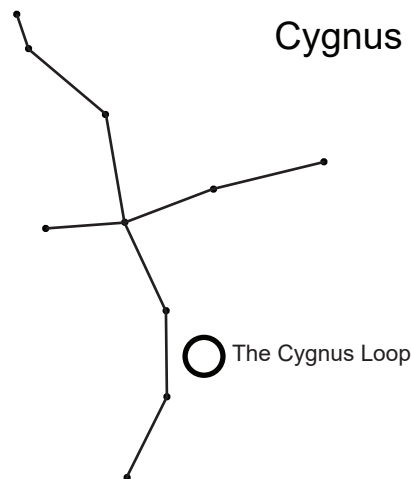
The Cygnus Loop

NGC 6960, 6992, 6995

Within the large constellation Cygnus the Swan is the supernova remnant the Cygnus Loop, comprised of the Eastern and Western Veils and Pickering's Triangle. It is estimated to be 2,400 light years away.

Approximately 10,000 to 20,000 years ago, a huge star, many times larger than our own, ran out of nuclear fuel - its huge shape maintained by the fusion of silicon to iron; but when the silicon ran out, the internal temperatures were not hot enough to fuse iron atoms to continue the nuclear process.

In 0.25 seconds, the gigantic star was collapsed by gravity causing a huge explosion - the remains of the star were cast out into space and heated by millions of degrees C. This increase in temperature allowed iron to fuse and then fuse into other elements.



Elements on the periodic table are created by nuclear fusion in the heart of stars up to Iron. Elements after this are created only in supernovae. Elements like lead, gold, silver, tin, uranium, copper etc are all created in this process. Any gold or silver you have on you was created this way. Calcium in your bones and Iron in your blood was created this way. You are made from star dust!

This picture shows the remains of the ancient star drifting through space, the Western Veil on the top right (often called the Witches Broom) is moving at 1.5 million miles an hour.