

Image: Hubble's portrait of star's gaseous glow

August 16 2019



Credit: ESA/Hubble & NASA, R. Wade

Although it looks more like an entity seen through a microscope than a



telescope, this rounded object, named NGC 2022, is certainly not algae or tiny, blobby jellyfish. Instead, it is a vast orb of gas in space, cast off by an aging star. The star is visible in the orb's center, shining through the gases it formerly held onto for most of its stellar life.

When stars like the Sun grow advanced in age, they expand and glow red. These so-called <u>red giants</u> then begin to lose their outer layers of material into space. More than half of such a star's mass can be shed in this manner, forming a shell of surrounding gas. At the same time, the star's core shrinks and grows hotter, emitting <u>ultraviolet light</u> that causes the expelled gases to glow.

This type of object is called, somewhat confusingly, a <u>planetary nebula</u>, though it has nothing to do with planets. The name derives from the rounded, planet-like appearance of these objects in early telescopes.

NGC 2022 is located in the constellation of Orion (the Hunter).

Provided by NASA's Goddard Space Flight Center

Citation: Image: Hubble's portrait of star's gaseous glow (2019, August 16) retrieved 27 April 2024 from <u>https://phys.org/news/2019-08-image-hubble-portrait-star-gaseous.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.