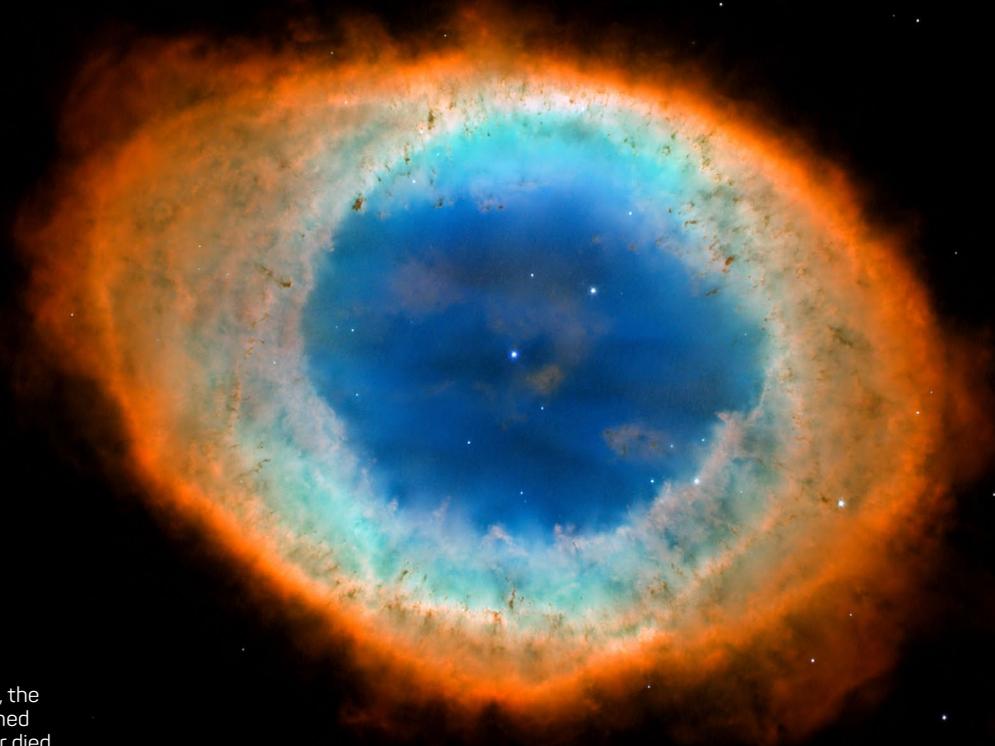


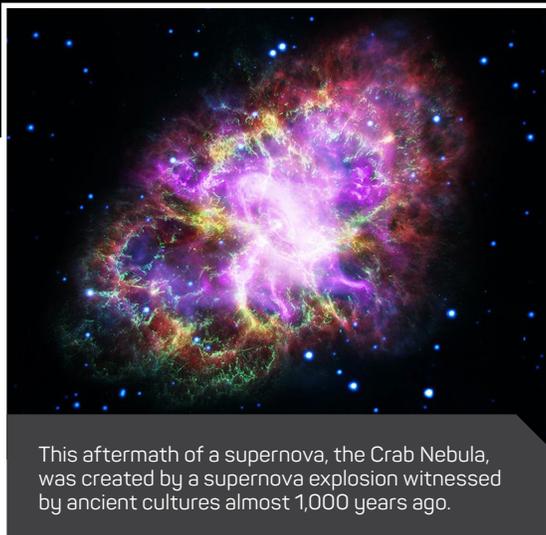
Planetary Nebula or Supernova?

Stars die in different ways depending on how massive they are.



This planetary nebula, the Ring Nebula, was formed when a Sun-sized star died.

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This aftermath of a supernova, the Crab Nebula, was created by a supernova explosion witnessed by ancient cultures almost 1,000 years ago.

Stars don't live forever, and they die in different ways. Many low-mass stars—the vast majority of stars in the universe—end their lives by losing their outermost layers of gas and dust. The expelled material moves away from the collapsing star, often creating beautiful, intricate patterns—called a *planetary nebula*—that can be viewed through a telescope. Using less-powerful telescopes in the past, these “fuzzy” objects resembled planets, resulting in their confusing name.

Rarer high-mass stars can die by exploding in violent events known as *supernovas*. A supernova is very different from the gentle shedding of gas and dust that characterizes the formation of a planetary nebula. These explosions occur much more quickly and emit a lot more energy—a supernova explosion can temporarily outshine the light from all of a galaxy's other stars put together. The resulting nebula is called a *supernova remnant*.