

研究人员们发现了一颗巨型恒星，其大气成分前所未见。他们认为这个庞大的物体是由两颗“白矮星”合并而成的，通常白矮星会以强大的超新星的形式爆炸。

The new star is what **astronomers** call a ‘white dwarf’. It's what stars like the Sun become at the end of their lives when they've used up all their **nuclear fuel**.

这颗新星被天文学家称为“白矮星”。它是像太阳这样的恒星在它们生命的尽头，耗尽所有核燃料后演化成的星体。

The star loses most of its **atmosphere**, leaving a very hot core. The heavier **atoms** in the atmosphere sink and the lighter ones remain at the surface. Some white dwarves have almost pure hydrogen or helium atmospheres, but this star has an atmosphere unusually high in the heavier **element**, carbon.

这颗恒星失去了大部分大气层，留下了一个炽热的核。大气中较重的原子下沉，而较轻的原子留在表面。一些白矮星的大气中几乎只有纯氢或氦，但这颗星的大气中重元素碳的含量异常高。

Computer modelling indicates it could have been created by the **merger** of two such stars. This suggests that such **occurrences** might be more common than previously thought.

计算机模型显示，这颗星可能由两颗类似的恒星合并而成。这表明，这种星体存在的数量可能比人们之前认为的更普遍。

1. 词汇表

astronomers	天文学家
nuclear fuel	核能燃料
atmosphere	大气层
atoms	原子
element	化学元素
computer modelling	计算机模型
merger	合并
occurrences	事物存在的数量

2. 阅读理解：请在读完上文后，回答下列问题。（答案见下页）

1. Where in the lifespan of a star is the white dwarf stage?
2. What type of atoms usually stay on the surface of a star?
3. How does this new star differ from other white dwarf stars?
4. True or false? *Computer modelling has caused two stars to merge, forming a new white dwarf star.*

3. 答案

1. Where in the lifespan of a star is the white dwarf stage?

A white dwarf star is what a star like the Sun becomes at the end of their lives when they've used up all their nuclear fuel.

2. What type of atoms usually stay on the surface of a star?

The heavier atoms in the atmosphere sink and the lighter ones remain at the surface.

3. How does this new star differ from other white dwarf stars?

This white dwarf star has an atmosphere unusually high in the heavier element, carbon.

4. True or false? *Computer modelling has caused two stars to merge, forming a new white dwarf star.*

False. Computer modelling indicates the new star could have been created by the merger of two such stars.