

SPACE[®] awareness



Retired Stars Take Up Sculpting! 8. listopadu 2012

When people retire they often take up a new hobby to fill the time, like drawing or fishing. Astronomers have recently spotted two 'retired' stars (called white dwarfs) at the centre of this beautiful nebula that have taken up sculpting! The red coloured jets of material shooting out of either side of this nebula are being twisted into curvy S-shapes by the dance between the two aged stars.

When a Sun-like star has burned up all its fuel, it begins to collapse inwards. The material in the star's core ends up squashed tightly down into a tiny, heavy ball. This ball is called a white dwarf star. The star also loses its outer shells of gas, which float off into space. The gas creates a planetary nebula — beautiful clouds around the white dwarfs, like the one shown in this new photo.

It's not often that astronomers find two white dwarfs orbiting each other in what astronomers call a 'binary system'. It's even stranger that they are so close together! Astronomers expect stars in a white dwarf binary system to take tens of years to complete an orbit around each other, but it takes little more than a day for these two!

As these two stars 'dance' around each other, their movement affects the behaviour of the jets, causing them to twist into these funky S-shapes. Astronomers have spent many years wondering how these funky jets were created and now they know!



• COOL FACT!

A piece of a white dwarf the size of a sugar cube would weigh about the same as a hippopotamus!



www.space-awareness.org/scoops

٨