

**BBC** WHY CLEANING YOUR TEETH PREVENTS DEMENTIA

# Science Focus

## WHAT **REALLY** CAUSES AUTISM?

Scientists are watching brains grow in a lab.  
For the first time, we might see how autism begins

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force-fed CO<sub>2</sub>

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when AI goes rogue

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space weapons

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procrastination



## EYE OPENER

### Hatching a nebula

Welcome to the Egg Nebula, an enigmatic structure formed by ejected stardust in the Cygnus constellation around 1,000 light-years from Earth. Shining at its centre is the 'yolk' – the glowing sphere of a dying star. Encasing it is a dense, almost opaque cloud of gas and dust, expelled by the star as it nears the end of its life.

What's most interesting to the astronomers studying this image, however, are the strikingly symmetrical patterns rippling through the surrounding material. They're too orderly to have been forged in a single, violent event, such as a supernova. Instead, it's thought the arcs were sculpted as the star gradually sputtered and shed its outer layers, rather than suddenly exploding.

Another remarkable feature of this image, which was captured by the Hubble Space Telescope, are the twin beams of light bursting from either side of the dust cloud. Astronomers think they're being split by something hidden in the cloud that's casting a shadow.

The Egg Nebula is the first, youngest and closest pre-planetary nebula ever identified. It represents a fleeting phase of a star's life – lasting only a few thousand years. Finding one offers a valuable chance to study what happens when Sun-like stars approach the end of their lives.

NASA/HUBBLE

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