



The Curious Case of the Spinning Star



Like a team of detectives, a group of astronomers are trying to solve a mystery. They have recently found a weird star that is about 25 times heavier than our Sun and spinning more than 300 times more quickly – it spins faster than any other known heavyweight star!

And while the star is spinning incredibly quickly, it is also moving in an odd way, travelling through space slower than other nearby stars – what an oddball!

The arrow in this photo points to the star that is under investigation. To try to understand why it is spinning and moving differently to other stars, astronomers have come up with a story to explain what might have happened. The star could have originally been part of a pair of stars when it was younger. If the two stars were very close together, the star could have been made to spin more quickly by gaining some extra material from its companion star – like a power-boosting snack!

However, the fast-spinning star no longer has a companion, so what happened to the other star? Astronomers think that the companion star exploded in what astronomers call a supernova. The power of the supernova explosion would have then pushed the fast-spinning star away. This would explain why the star is the oddball compared to other nearby stars – travelling more slowly through space – because it is a newcomer to this region.

“This star is certainly providing intriguing clues about the short, but dramatic lives of the heaviest stars,” says astronomer Philip Dufton.

COOL FACT

An airplane travelling at the speed that this massive star is spinning would only take about one minute to circle the Earth at the equator!



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