

A new(ish) star is born

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AP Columbae

(PhysOrg.com) -- Researchers have uncovered a new stellar neighbour with the discovery of the closest young star to Earth.

The international team, including Simon Murphy, a final-year PhD student from the ANU Research School of [Astronomy and Astrophysics](#), have shown that the star, named AP Columbae, is the closest so-called 'pre main-sequence' star. Their paper has been published this week in *The Astronomical Journal*.

“Pre main-sequence stars are much younger than the Sun. Using telescopes in Coonabarabran, Chile, Hawaii and California we have shown that the faint, red-dwarf star AP Columbae is the closest such star to the [Earth](#),” said Mr Murphy.

“For decades it was believed that [young stars](#) only resided in vast star-forming regions like the Orion Nebula. These regions are typically several hundred light years away from the Earth. With the advent of accurate, all-sky surveys we can now find young stars much closer to home.”

AP Columbae, an otherwise innocuous red-dwarf star in the constellation of Columba is a comparably close 27-light-years away from Earth and approximately 40 million years old.

“To put that into perspective, it means this star was formed after the dinosaurs became extinct and when mammals first started to become dominant on Earth,” Mr Murphy said.

The star is the newest member of a group of young stars known as the Argus Association. The age and close proximity of AP Columbae make it a prime candidate for getting good images.

“Because AP Columbae is so close we are able to hunt for giant gas planets at high resolution, close to the star. Later this year we are hoping to use the eight metre Gemini South telescope in Chile to observe any planets that might be present.”

Provided by Australian National University

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