

# COVER IMAGES

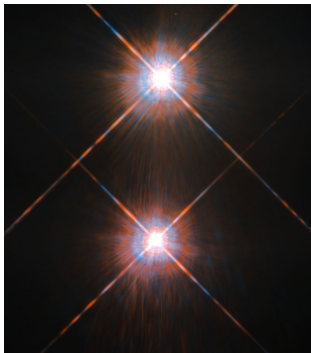
## Cover images for this Issue 53

Our cover images for this issue feature remarkable views of our two main interstellar neighbours, Alpha Centauri A and B, courtesy of the Hubble Space Telescope and the James Webb Space Telescope. Humanity's initial interstellar venture may be to Proxima Centauri; although that remains a small point of light in our best telescopes for now.

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### FRONT COVER

## Alpha Centauri A and B from the Hubble Telescope



The NASA/ESA Hubble Space Telescope has this stunning view of the bright Alpha Centauri A (on the top) and Alpha Centauri B (on the bottom). The image was captured by the Wide Field and Planetary Camera 2.

Image credit: ESA/Hubble & NASA  
<https://esahubble.org/images/potw1635a/>

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### BACK COVER

## Alpha Centauri A and B from the James Webb Space Telescope (JWST)

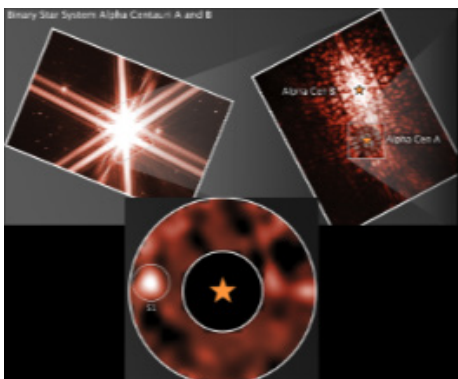


Image top left shows Alpha Centauri A and Alpha Centauri B. Image top right shows the system with a coronagraphic mask placed over Alpha Centauri A to block its bright glare. However, the way the light bends around the edges of the coronagraph creates ripples of light in the surrounding space. The telescope's optics cause some light to interfere with itself, producing circular and spoke-like patterns. These complex light patterns, along with light from the nearby Alpha Centauri B, make it incredibly difficult to spot faint planets. In the bottom image, astronomers have subtracted the known patterns (using reference images and algorithms) to clean up the image and reveal faint sources like the candidate planet.

Credit Image and caption: NASA, ESA, CSA, STScI, A Sanghi (Caltech), C Beichman (JPL), D Mawet (Caltech), J DePasquale (STScI)  
<https://esawebb.org/images/weic2515c/>