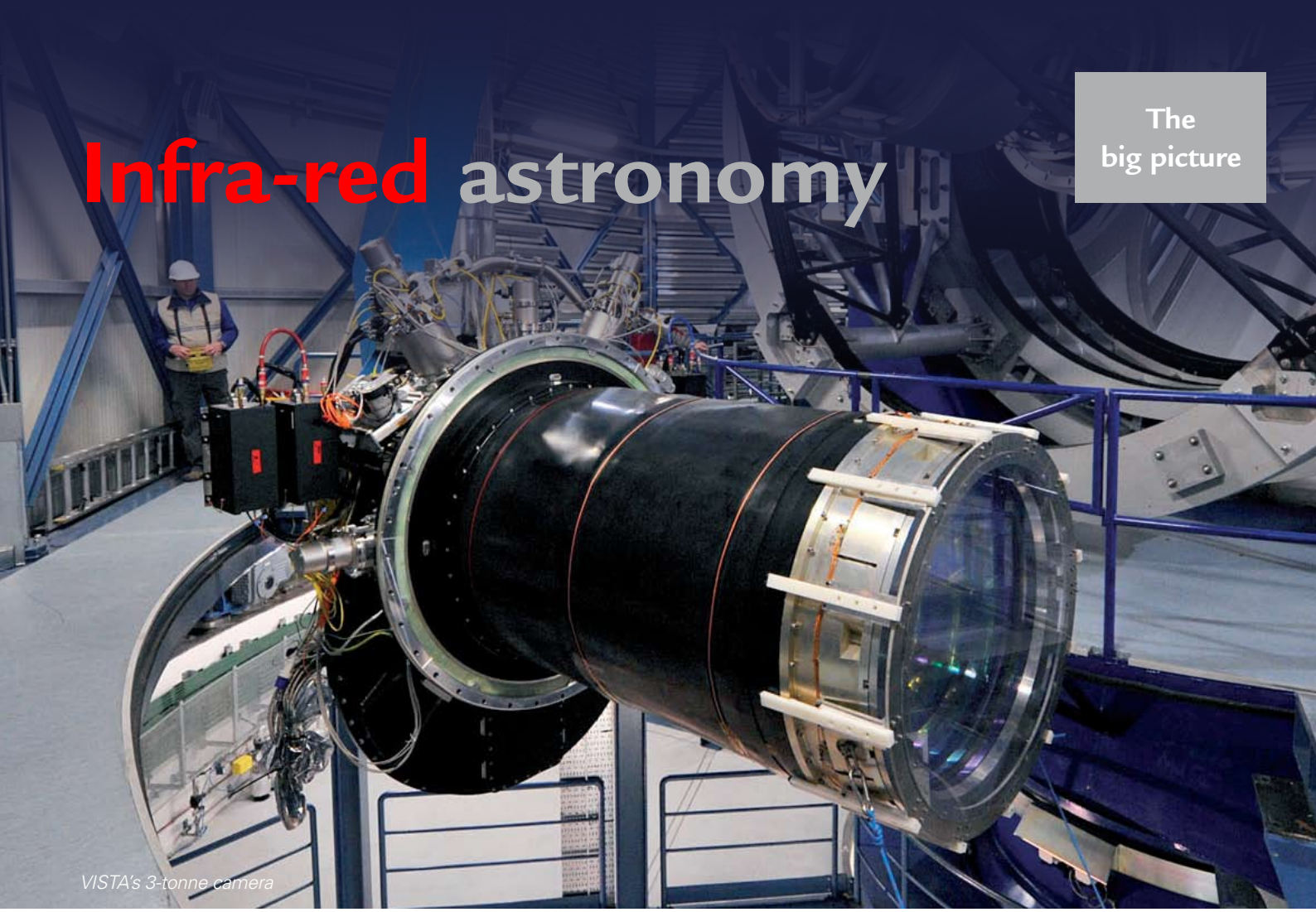
Infra-red astronomy



VISTA's 3-tonne camera

High on a mountain-top in Chile stands the VISTA telescope. Astronomers have recently released VISTA's first images – you can see one on the centre spread of this issue of CATALYST.

VISTA is no ordinary telescope. It can 'see' infra-red radiation – electromagnetic radiation beyond the red end of the spectrum.

The VISTA telescope inside its dome.

On the left, the Flame Nebula as seen in visible light; the central area is blocked by a giant cloud of dust. VISTA's infrared view, on the right, sees through the dust.

This has two great benefits:

- The telescope can detect radiation from distant stars which are otherwise hidden behind clouds of dust which absorbs visible light.
- The telescope can see cool stars which emit little visible light.

VISTA's camera is impressive. It weighs 3 tonnes and has 16 detectors with a total of 67 million pixels.

Professor Jim Emerson of Queen Mary University of London leads the VISTA consortium. He says, "History has shown us that the most exciting things that come out of projects like VISTA are what you least expect — and I'm very excited to see what these will be!"

VISTA stands for Visible and Infra-red Survey Telescope for Astronomy.

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The VISTA telescope's image of the Flame Nebula in the constellation of Orion, a region in which new stars are forming.