

No3437 US\$7.99 CAN\$9.99

1 8 > 1 95459"30690 9

PLUS COVID-19 IN THE GUT / A STAR TAKES ITS REVENGE / YOUR INNER GOBLIN / CAT PARADOX / PHYSICS OF CHAMPAGNE

Science and technology news www.newscientist.com

## Views Aperture







## Space junk

## Ĩ0)

## Photographer Max Alexander

THESE images aren't just a whimsical collection of space memorabilia. Part of *Our Fragile Space: Protecting the near-space environment*, an exhibition by photographer Max Alexander, they highlight a growing problem: increasing amounts of debris are orbiting Earth in the same region of space as thousands of satellites, heightening the risk of collisions.

Alexander collaborated with astronomy writer Stuart Clark, the University of Warwick, UK, and its Centre for Space Domain Awareness, among others, to draw attention to the impact of the some 160 million pieces of cosmic waste circling Earth – all of which have human-made origins.

Clockwise from top left, the images show: a fuel tank from the second stage of a Delta rocket that returned to Earth in 1997, with craters from impacts with space debris and micrometeorites; the control room of Chilbolton Observatory, the main UK facility for tracking civilian satellites and space debris; a piece of an Ariane 4 rocket, which launched a satellite in 1995 that was later involved in the first verified satellite-debris collision; a puncture made in an aluminium plate by a plastic projectile travelling at high velocity, as part of a study into the effects of impacts at orbital speed; a view of Greenwich in London with a montage of examples of space debris superimposed on the sky; and an astronaut's glove dropped during a spacewalk from the Gemini IV mission in 1965.

*Our Fragile Space* will run at Coventry Cathedral, UK, from 6 to 21 May; at the Vienna International Centre in Austria from 31 May to 9 June; then at Jodrell Bank, UK, from 12 June to mid-September.

Gege Li