

New Scientist

WEEKLY July 10-16, 2021

SPECIAL ISSUE

CONSCIOUSNESS

The 10 biggest questions about the greatest mystery in the universe

TOO LITTLE TOO SOON?
England to scrap covid-19 restrictions despite surge in cases

EXTREME HEAT
North America's extraordinary new temperature highs

PROBLEM PAVEMENTS
Why it's time to reinvent the sidewalk

What is consciousness?

When did consciousness evolve?

Does consciousness create reality?

What is consciousness for?

Is the universe conscious?

Can you see consciousness in the brain?

What is consciousness like in other animals?

Can we know if a machine is conscious?

Can physics explain consciousness?

How many kinds of consciousness do we have?

PLUS HOW MALE SEAHORSES GET PREGNANT / DID NEANDERTHALS GET COLDS? / INTERSTELLAR INTERCEPTOR / MICROBES THAT EAT PLASTIC / IS ICELAND A CONTINENT?

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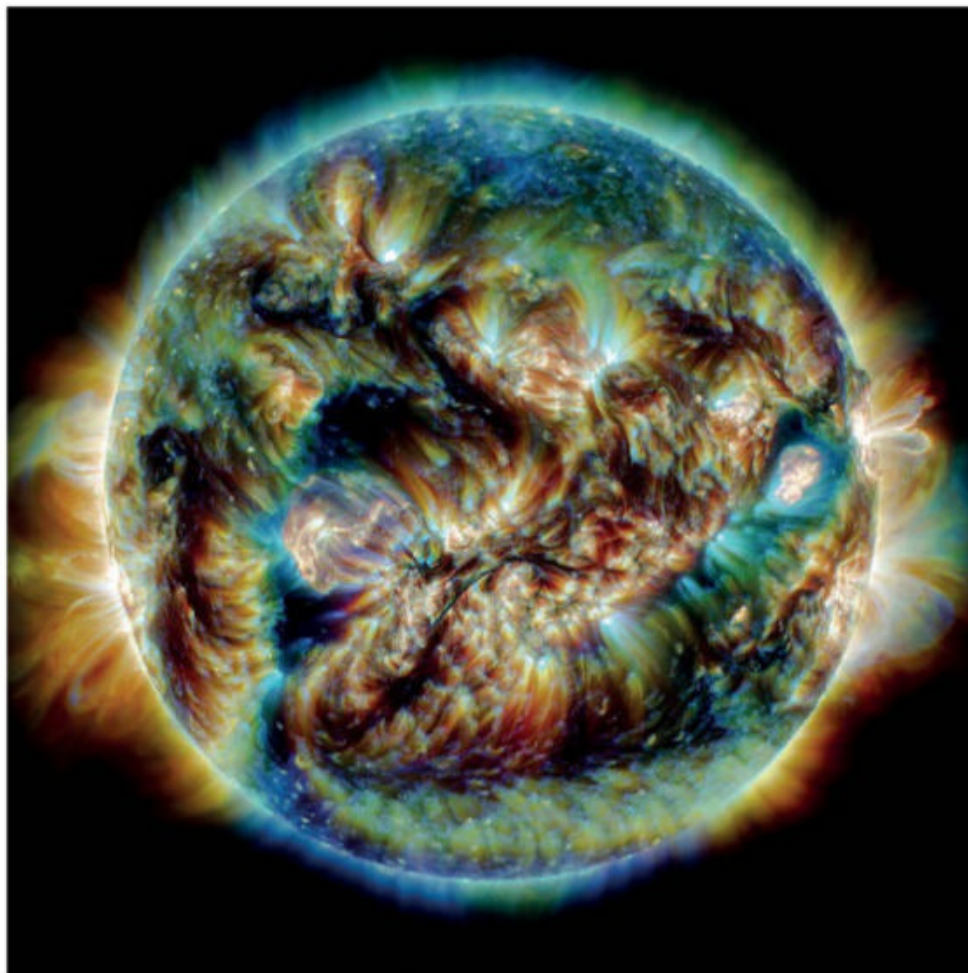


L-R: ICELAND VORTEX © LARRY RAE; MILKY WAY RISING OVER DURDLÉ DOOR © ANTHONY SULLIVAN



L-R: THE CAVE © MARKUS VAN HAUTEN; DOLPHIN HEAD NEBULA © YOVIN YAHATHUGODA; THE TUMULT OF THE SUN © HASSAN HATAMI





Stellar shots



THESE spellbinding images are among the shortlisted entries for the Astronomy Photographer of the Year 2021, organised by the Royal Observatory in London.

At top left, the aurora borealis is showcased in *Iceland Vortex* by Larryn Rae, who can be seen at the centre of the image. Rae's panoramic shot highlights the scale of this iconic light display, which is caused by charged particles colliding with atmospheric gases.

Anthony Sullivan's *Milky Way Rising Over Durdle Door* (top right) shows the Jurassic Coast World Heritage Site in Dorset, UK – famous for its bounty of ancient rocks and fossils – as illuminated by our galaxy. The two bright spots towards the left of the image are Jupiter and Saturn.

The aurora borealis features again in *The Cave* (bottom left), a composite image by Markus van Hauten, taken at Iceland's Breiðamerkurjökull glacier.

Dolphin Head Nebula (bottom centre) by Yovin Yahathugoda shows a giant interstellar cloud of gas and dust at the heart of the constellation Canis Major.

To create *The Tumult of the Sun* (bottom right), Hassan Hatami merged thousands of shots of the sun taken by the Solar Dynamics Observatory, a NASA spacecraft that is studying our solar system's star.

The competition winners will be announced on 16 September. ■

Gege Li