

**BBC**

**UNLOCKING THE POTENTIAL OF LUCID DREAMS**

# Science Focus

*How to build a*  
**SILENT SUPERSONIC AEROPLANE**

*The problem with*  
**SPACE TOURISM POLLUTION**

# MYSTERIES OF THE ABYSS

**THE CREATURES UNKNOWN TO SCIENCE**

**THE MISSIONS TO MAP THE ENTIRE OCEAN FLOOR**

**THE PLANS TO BUILD A PERMANENT DEEP-SEA HABITAT**

**THE CELL-LIKE STRUCTURES THAT MAY HAVE SEEDED LIFE ON EARTH**

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**IN THIS ISSUE**

**James Bond**

Alcoholism, STDs and head injuries...  
a doctor gives 007 a physical

**Health**

Why Michael Mosley takes  
a cold shower every day

**Education**

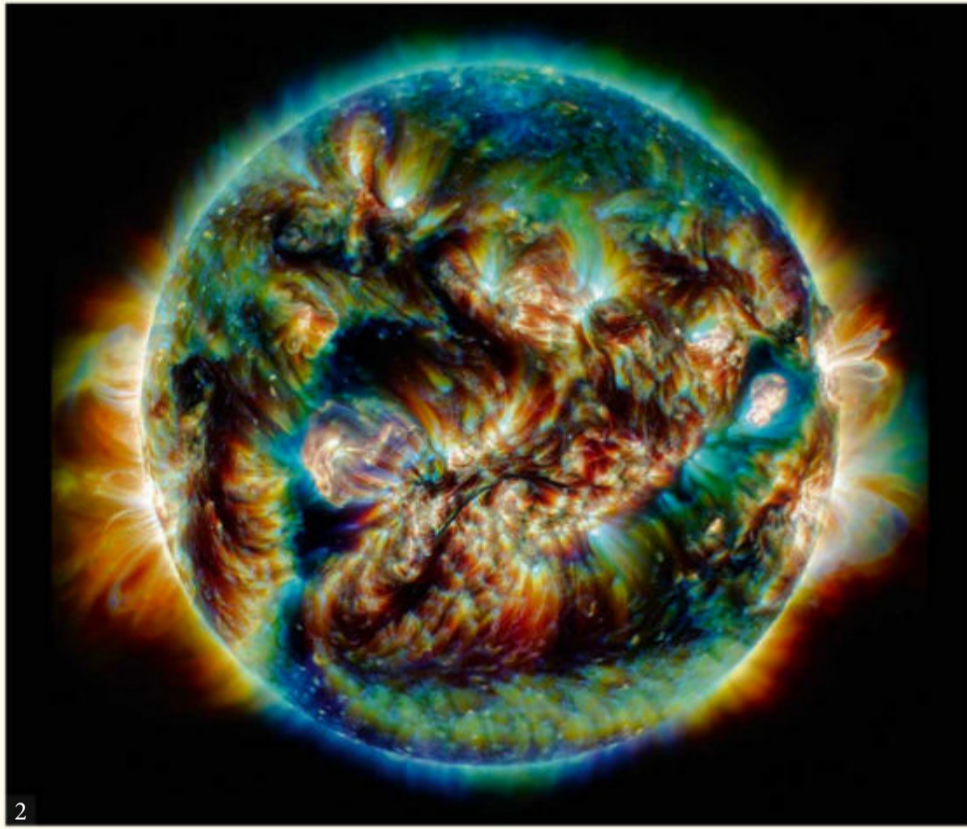
How to change  
careers successfully



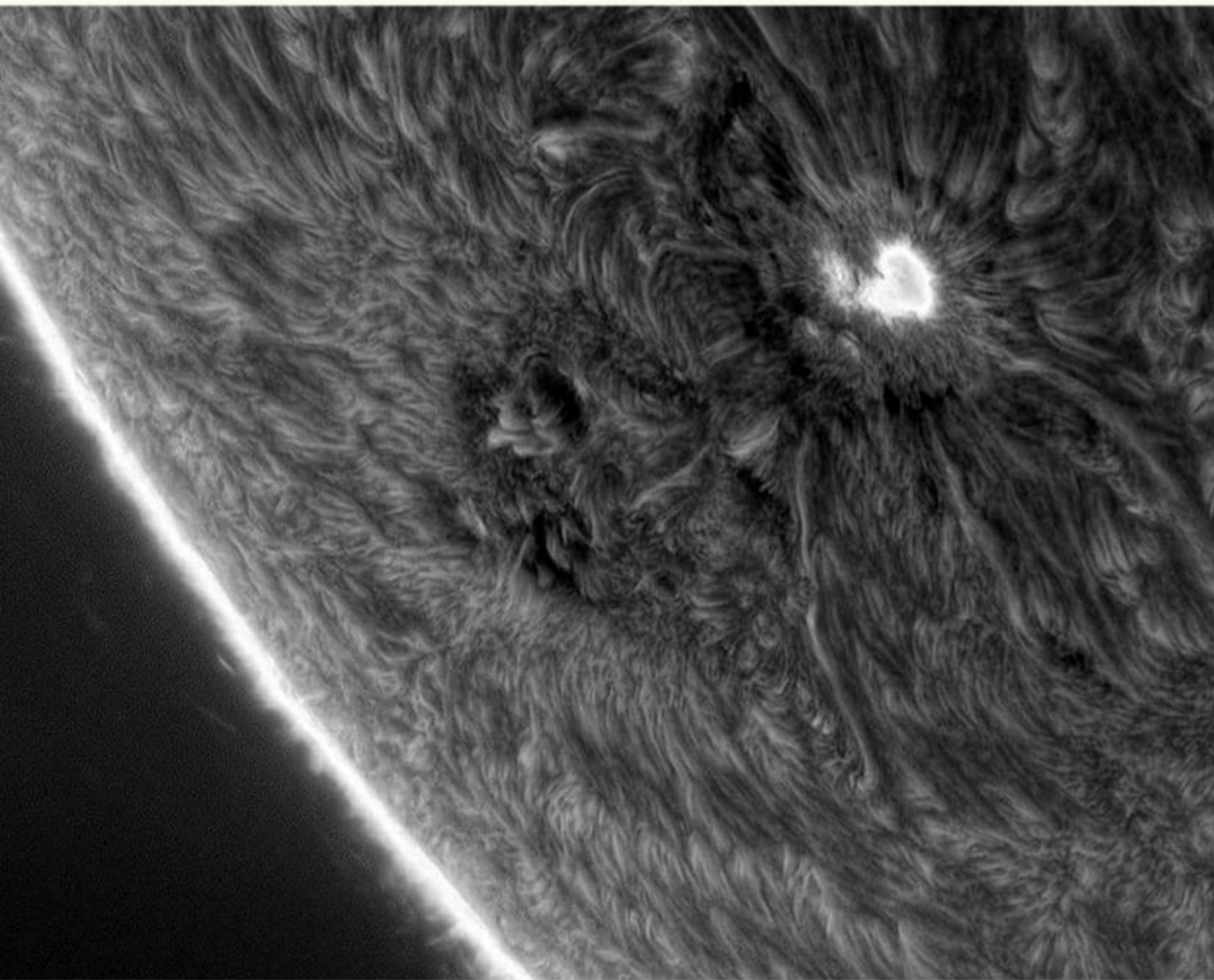
ASTRONOMY

# Astronomy Photographer of the Year teases this year's shortlist

The contenders for the world's largest astrophotography competition have been chosen. The winners will be announced at an online ceremony on 16 September. Following the ceremony, a selection of the winning and shortlisted images will be displayed at an exhibition at the National Maritime Museum, London, from 18 September.



GÖRAN STRAND, MARCIN ZAJAC, HASSAM HATAMI, LARRY RAE, SIU FONE TANG



**1. Lunar halo**

*by Göran Strand*

This lunar halo was taken in a temperature of  $-16^{\circ}\text{C}$ . This optical phenomenon forms when moonlight is refracted by ice crystals hanging in the atmosphere.

**2. The tumult of the Sun**

*by Hassan Hatami*

This image was created from data collected by NASA's Solar Dynamics Observatory. It shows the tumultuous currents that churn around the Sun's surface.

**3. Alien throne**

*by Marcin Zajac*

Locals living in the Badlands of New Mexico refer to rock spires as hoodoos, their otherworldly shape is formed from layers of soft and hard rock that have eroded over time. This particularly ornate

example is photographed with the Milky Way in the background.

**4. Iceland vortex**

*by Larryn Rae*

The aurora borealis is shown here in a  $250^{\circ}$  panoramic shot. The ghostly lights are formed by charged particles emanating from solar winds that get trapped in the Earth's magnetic field.

**5. Sunspot looking out into space**

*by Siu Fone Tang*

Although the exact details of sunspot formation are not well understood, they coincide with areas on the Sun's surface with an increased magnetic field. These suppress the release of heat, making them thousands of degrees cooler than the surrounding area.