

# Fake stars, panda suits and ants on treadmills

February's sharpest science shots, selected by *Nature's* photo team.

**Daniel Cressey**

24 February 2017

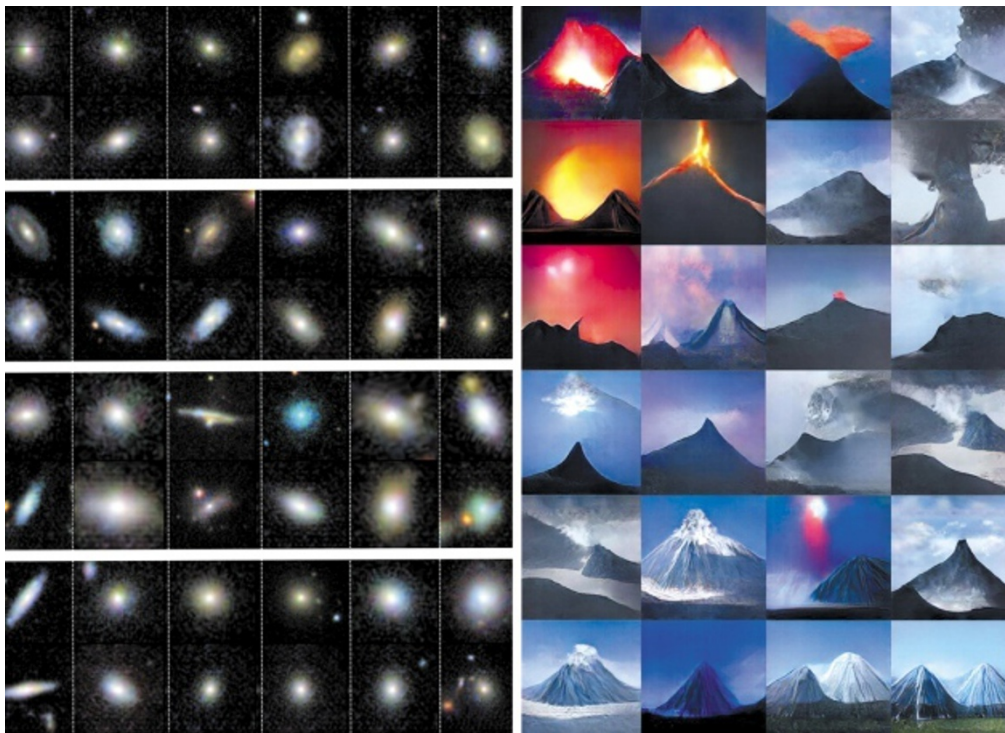
## Super sack



Meet *Saccorhynchus coronarius*, a millimetre-sized animal from at least 529 million years ago (artist's impression). Named from a fossil in [a \*Nature\* paper<sup>1</sup>](#) for its “bag-like body” and “wrinkled preservation”, it might be the oldest-known member of the deuterostomes, a superphylum that includes species ranging from starfish to humans — so, this critter might have a place on your family tree.

*Jian Han/Northwest University, China*

## Faking it



Left: Figure: S. Ravanbakhsh/data: [arxiv.org/abs/1609.05796](https://arxiv.org/abs/1609.05796); Right: Nguyen et al./[arxiv.org/abs/1612.00005](https://arxiv.org/abs/1612.00005)

These striking volcanoes exist only in the digital realm. They are the products of research by scientists who are using pictures generated by artificial intelligence to train image-recognition programs. Likewise, the lower of each pair of galaxies is AI-generated, and populated only by fake stars.

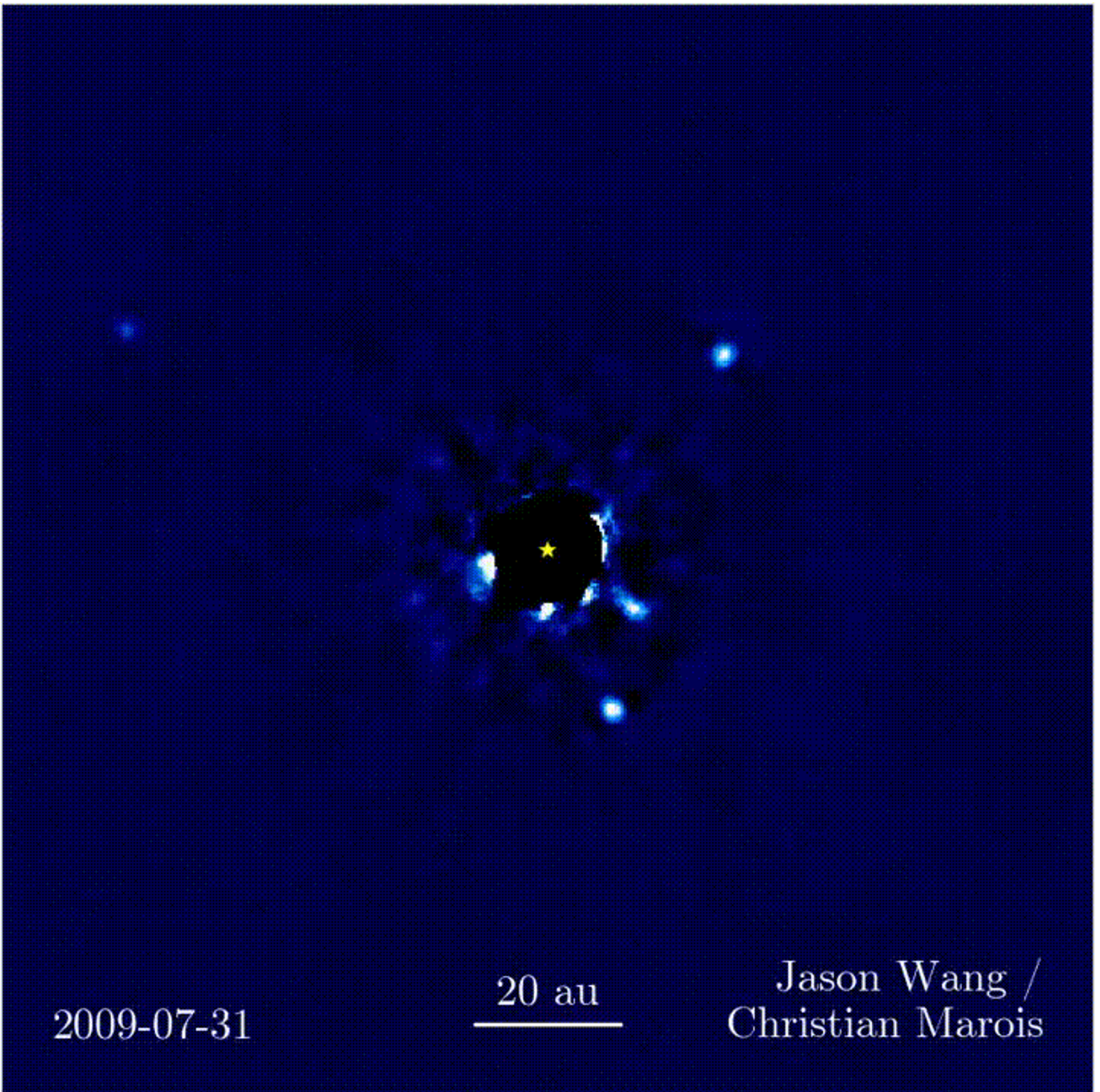
## Lake light



Christopher Miller/The New York Times/Eyevine

Great Bear Lake in northern Canada has been called “the last pristine arctic lake” by the United Nations Educational, Scientific and Cultural Organization (UNESCO), which last year designated it and its surrounding territory as the Tsá Tué Biosphere Reserve. While on assignment for *The New York Times*, Christopher Miller took this photograph of the lodges that some of the local Sahtuto'ine (‘Bear Lake people’) use for smoking fish and drying meat.

## In orbit around a distant sun



*Jason Wang/Christian Marois*

By combining images taken over seven years at the Keck Observatory in Hawaii, researchers produced this film of four planets orbiting the star HR 8799. Each planet is more massive than Jupiter, with orbits ranging from 40 to 400 years.

#### **World Press Photo 2017**



Hungarian wildlife photographer Bence Máté took third prize in the Nature–Stories category of this year’s World Press Photo contest for his remarkable series of shots that combine starry skies with wild animals.

### Dancing octopus



*Underwater Photographer of the Year 2017/Gabriel Barathieu*

Photographer Gabriel Barathieu captured this shot of an octopus 'dancing' in shallow waters off the French island of Mayotte in the Indian Ocean — and with it also captured the [Underwater Photographer of the Year 2017](#) award.

### Between Blossoms



An exhibition called 'Between Blossoms', by artist Shen Wei, opens on 2 March at the appropriately named [Flowers Gallery](#) in New York City. It has a "focus on vegetal subject matter", according to the gallery, "with trees acting as a thread interwoven throughout the series".

*Shen Wei/Flowers Gallery*

### Running fast, going nowhere



## Desert ant on spherical treadmill

Matthias Wittlinger

Animals on treadmills have a [long and distinguished history](#) in science. Hansjürgen Dahmen, Matthias Wittlinger and their colleagues tweaked an existing design that uses a spherical ball suspended in a jet of air to track the path and walking behaviour of an animal atop the globe. In a [paper published last week](#)<sup>3</sup>, the team describes using the treadmill to analyse the behaviour of *Cataglyphis* desert ants.

## Fashion world abuzz



*JP Yim/Getty Images for Nick Graham*

Astronaut Buzz Aldrin was the unexpected star of the show at the New York Men's Fashion Week. The show, by designer Nick Graham, was apparently Mars themed. He's Buzz Aldrin. He can do whatever he wants.

## **- References**

1. Han, J., Conway Morris, S., Ou, Q., Shu, D. & Huang, H. *Nature* **542**, 228–231 (2017).
2. Rahman, I. A. *Nature* **542**, 170–171 (2017).
3. Dahmen, H., Wahl, V. L., Pfeffer, S. E., Mallot, H. A. & Wittlinger, M. *J. Exp. Biol.* **220**, 634–644 (2017).