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AUGUST 2023

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1973-2023

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SNAPSHOT

HOPE BUZZES DEIMOS

A new look at Mars' smaller moon highlights its mysterious origin.

Mars looms large, but the highlight of this shot is the Red Planet's smallest moon: Deimos, just 7.7 miles (12.4 kilometers) wide. The close-up was taken by the United Arab Emirates' Hope spacecraft, which has been orbiting the Red Planet since 2021. On March 10, Hope made its first of several planned flybys of Deimos, sending back unprecedented photographs of the moon's farside. "This was approximately 100 kilometers [62 miles] up, and I don't believe we will get that close again," Hessa Al Matroushi, the science lead for the Emirates Mars Mission, tells *Astronomy*. The flyby allowed the probe's two spectrometers to record crucial data about the moon's composition. They suggest Deimos is made of material similar to Mars itself and not the carbon-rich rock that would be expected if Deimos was a captured asteroid, as scientists once suspected. That supports theories that both Deimos and Phobos — Mars' other moon — formed in orbit when a large object, perhaps a dwarf planet, struck Mars in the distant past. —TOM METCALFE



HOT BYTES



DOUBLE QUASAR
The Hubble Space Telescope found that J0749+2255 is a rare binary quasar. It hosts two active supermassive black holes at the centers of merging galaxies, shown in this illustration.



SALT TRAIL
Data from the NASA/ESA Solar and Heliospheric Observatory show that the asteroid Phaethon's cometlike tail is not dust, as previously thought, but glowing sodium atoms.



LOST LANDER
The HAKUTO-R Mission 1 robotic lander, developed by Tokyo-based startup ispace, crashed on the Moon's surface April 25 in a bid to make the first private soft lunar landing. A 2019 attempt by an Israeli firm also failed.