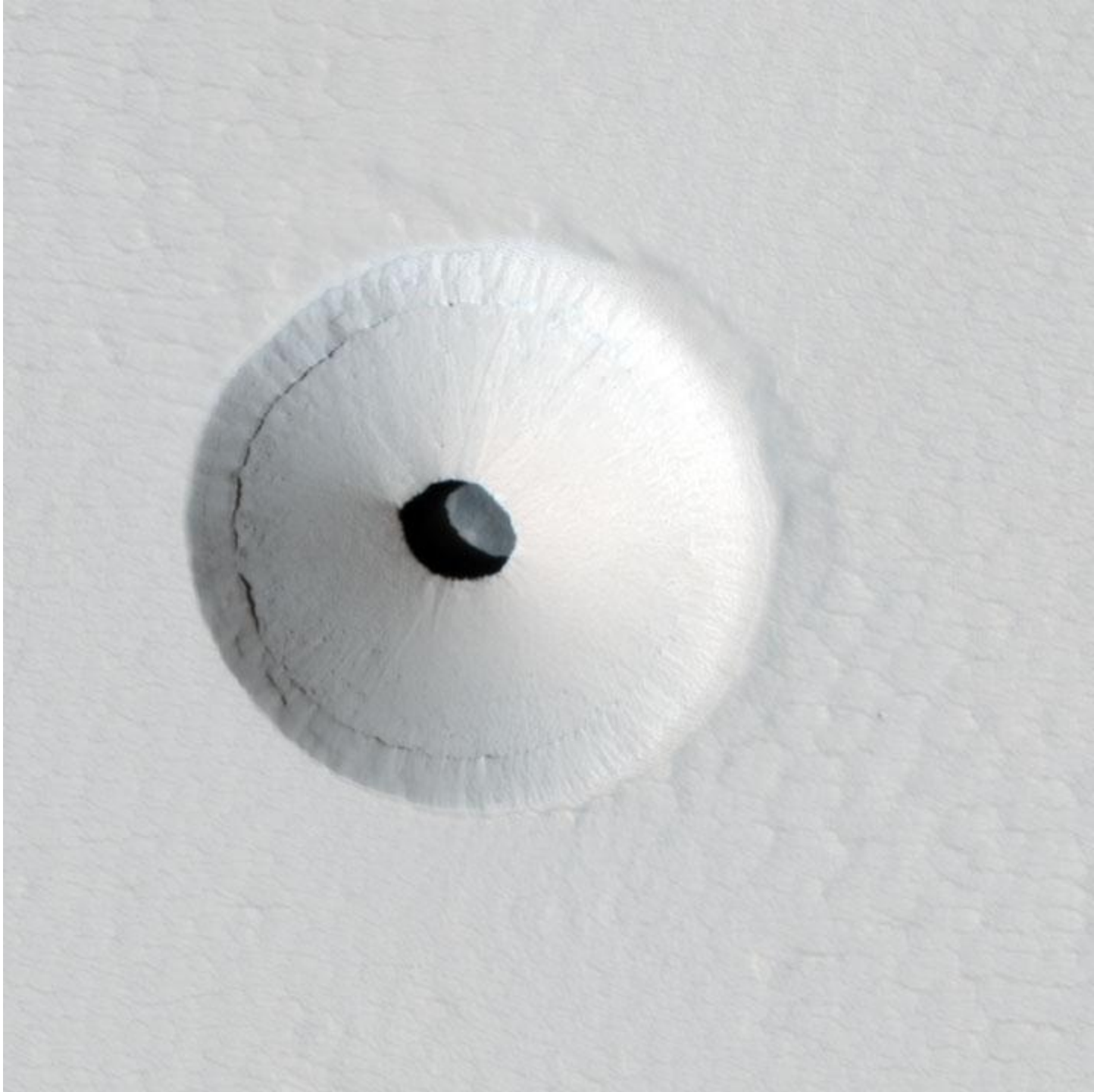# Astronomy Picture of the Day

[Discover the cosmos!](#) Each day a different image or photograph of our fascinating universe is featured, along with a brief explanation written by a professional astronomer.

A Hole in Mars
Image Credit: NASA, JPL, U. Arizona

Explanation: What created this unusual hole in Mars? [The hole](#) was discovered by chance on images of the dusty slopes of Mars' [Pavonis Mons](#) volcano taken by the [HiRISE](#) instrument aboard the robotic [Mars Reconnaissance Orbiter](#) currently circling Mars. The hole appears to be an opening to an underground cavern, partly illuminated on the image right. Analysis of this and follow-up images revealed the [opening](#) to be about 35 meters across, while the interior [shadow](#) angle indicates that the underlying cavern is roughly 20 meters deep. Why there is a circular crater surrounding this hole remains a topic of [speculation](#), as is the full extent of the underlying cavern. [Holes](#) such as [this](#) are of particular interest because their interior caves are relatively protected from the harsh surface of Mars, making them relatively good candidates to [contain Martian life](#). These pits are therefore prime targets for [possible future spacecraft, robots](#), and even [human interplanetary explorers](#).

ASOW: [From the Big Bang to the Nobel Prize and the End of the Universe](#) by John C. Mather
Tomorrow's picture: [dawn of the dish](#)

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