

- 1) Two Venus Mission Discovery Proposals, DAVINCI+ and VERITAS, have made it to Step-2.
- 2) The Venus Strategic Documents were presented to SMD at NASA Headquarters
- 3) Exoplanets In our Backyard Workshop was a tremendous success
- 4) NASA is looking for more Artemis Generation Astronauts

11

Two Venus Mission Discovery Proposals, DAVINCI+ and VERITAS, have made it to Step-2.

<https://www.nasa.gov/press-release/nasa-selects-four-possible-missions-to-study-the-secrets-of-the-solar-system>

Good News - Discovery Missions selected for Mission Concept Studies are:

DAVINCI+ (Deep Atmosphere Venus Investigation of Noble gases, Chemistry, and Imaging Plus)

DAVINCI+ will analyze Venus' atmosphere to understand how it formed, evolved and determine whether Venus ever had an ocean. DAVINCI+ plunges through Venus' inhospitable atmosphere to precisely measure its composition down to the surface. The instruments are encapsulated within a purpose-built descent sphere to protect them from the intense environment of Venus. The 'i' in DAVINCI+ refers to the imaging component of the mission, which includes cameras on the descent sphere and orbiter designed to map surface rock-type. The last U.S.-led, in-situ mission to Venus was in 1978. The results from DAVINCI+ have the potential to reshape our understanding of terrestrial planet formation in our solar system and beyond. James Garvin of NASA's Goddard Space Flight Center in Greenbelt, Maryland, is the principal investigator. Goddard would provide project management.

And

VERITAS (Venus Emissivity, Radio Science, InSAR, Topography, and Spectroscopy)

VERITAS would map Venus' surface to determine the planet's geologic history and understand why Venus developed so differently than the Earth. Orbiting Venus with a synthetic aperture radar, VERITAS charts surface elevations over nearly the entire planet to create three-dimensional reconstructions of topography and confirm whether processes, such as plate tectonics and volcanism, are still active on Venus. VERITAS would also map infrared emissions from the surface to map Venus' geology, which is largely unknown. Suzanne Smrekar of NASA's Jet Propulsion Laboratory (JPL) in Pasadena, California, is the principal investigator. JPL would provide project management.

Both missions have posters at the upcoming LPSC meeting, and will be giving short introduction talks at the VEXAG Town Hall (Wednesday noon).

22

The Venus Strategic Documents were presented to SMD at NASA Headquarters

Candidates also must have at least two years of related, progressively responsible professional experience, or at least 1,000 hours of pilot-in-command time in jet aircraft. Astronaut candidates must pass the NASA long-duration spaceflight physical.

Americans may apply to #BeAnAstronaut at: www.usajobs.gov <<http://www.usajobs.gov/>>

As part of the application process, applicants will, for the first time, be required to take an online assessment that will require up to two hours to complete.

After completing training, the new astronauts could launch on American rockets and spacecraft developed for NASA's Commercial Crew Program to live and work aboard the International Space Station, 250 miles above Earth, where they will take part in experiments that benefit life at home and prepare us for more distant exploration.

They may also launch on NASA's powerful new Space Launch System rocket and Orion spacecraft, docking the spacecraft at the Gateway in lunar orbit before taking a new human landing system to the Moon's surface. After returning humans to the Moon in 2024, NASA plans to establish sustainable lunar exploration by 2028. Gaining new experiences on and around the Moon will prepare NASA to send the first humans to Mars in the mid-2030s.

NASA expects to select the new class of astronaut candidates in mid-2021 to begin training as the next class of Artemis Generation astronauts.

For more information about a career as a NASA astronaut, and application requirements, visit: <http://www.nasa.gov/astronauts>