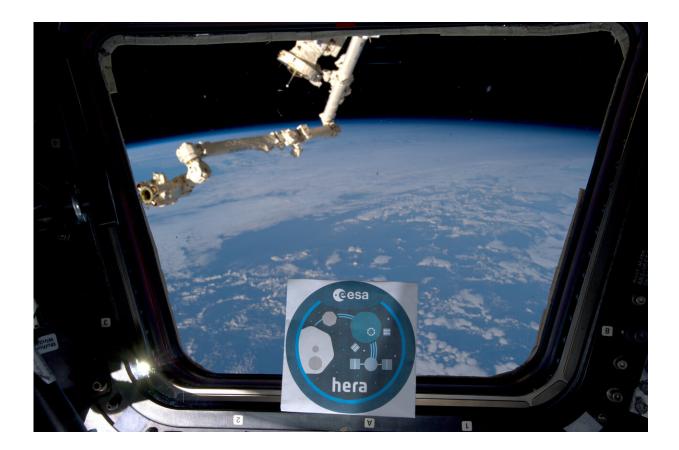


Image: Hera logo aboard ISS

October 2 2019



Credit: ESA-L. Parmitano

The logo for Hera, ESA's proposed asteroid mission for planetary defense, has already reached space, thanks to ESA astronaut Luca Parmitano, who snapped this photo from the cupola of the International Space Station. The Hera mission itself is seeking final approval for development at the Space19+ Ministerial Council this November.



"The Hera team welcomes this high-profile appearance," says Ian Carnelli, managing Hera. "The next time our logo will get anywhere near this high would be for its initial moments of flight, covering the fairing of its Ariane 6 launcher."

Part of ESA's new Space Safety program, Hera is planned as Europe's contribution to an audacious planetary defense experiment. In summer 2022, NASA's DART mission will impact the smaller of the Didymos <u>binary asteroids</u>, in an attempt to deflect it.

Hera would then perform a detailed post-impact survey of the deflected body, measuring its mass and the size and shape of the crater left by DART, to turn planetary deflection into a well-understood technique that could be performed against various scales of targets if ever needed to actually defend Earth.

"Asteroids hold unique information about Solar System formation and ultimately about our own origins," comments Luca. "They are tracers of Solar System formation where collisions played a fundamental role.

"Understanding the impact processes at scales beyond what is achievable in laboratories provides important clues on the evolution of the Solar System, including our own planet. It is fascinating to think that the same science can protect our planet from asteroid impacts."

The Hera logo summarizes key goals of the Hera mission: protection from asteroid impact, modeling binary asteroid systems, preventing asteroid collisions and developing new technology—including the two CubeSats the spacecraft will deploy to perform close-up surveys.

Provided by European Space Agency



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