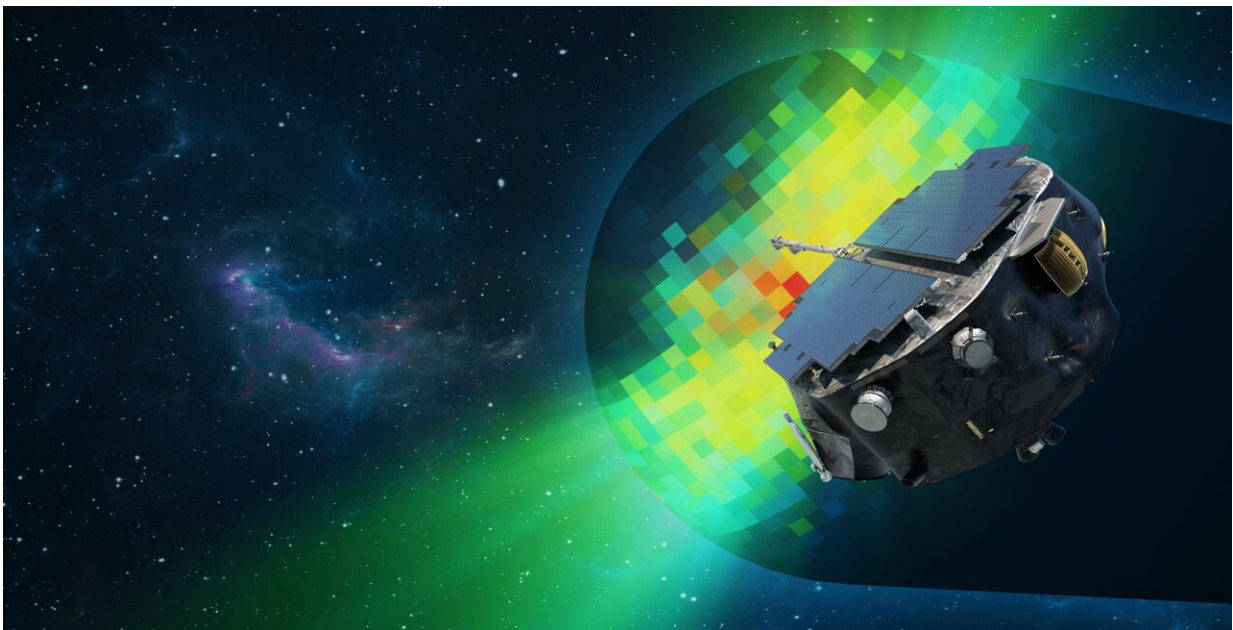


NASA's Interstellar Mapping and Acceleration Probe passes system integration review

September 26 2023, by Vanessa Thomas



IMAP will study the protective magnetic bubble that surrounds our solar system, called the heliosphere, and the particle acceleration that occurs across it. Credit: NASA/Princeton/Johns Hopkins APL/Josh Diaz

The Interstellar Mapping and Acceleration Probe (IMAP) marked the completion of an important step on the path to spacecraft assembly, test, and launch operations in late September 2023 at Johns Hopkins Applied Physics Laboratory (APL) in Maryland.

The IMAP team met with a review panel to evaluate the plan for integrating all systems onto the [spacecraft](#), such as the scientific instrumentation, electrical and [communication systems](#), and [navigation systems](#).

Successful completion of this System Integration Review (SIR) means that the project can proceed with assembling and testing the spacecraft in preparation for launch. This process is a bit like a carefully choreographed dance where the instruments and [support systems](#) are delivered to different facilities, tested together in chambers in Los Alamos, New Mexico; San Antonio, Texas; and Princeton, New Jersey; and shipped back to be integrated and tested again altogether.

On Friday, Sept. 15, 2023, the chair of the Standing Review Board announced that the IMAP project successfully passed the SIR requirements to proceed to integration and test.

"I am incredibly proud of the entire IMAP team for everyone's hard work and determination in getting us to and through this critical milestone," said David McComas, IMAP [mission](#) principal investigator and Princeton University professor. "We are now moving on to spacecraft integration and test, where all of the individual subsystems and instruments merge together to create our full IMAP observatory."

The IMAP mission, which will be ready to launch in 2025, will explore our solar neighborhood, decoding the messages in particles from the sun and beyond our cosmic shield. The mission will map the boundaries of the heliosphere—the electromagnetic bubble surrounding the sun and planets that is inflated by the solar wind.

David McComas leads the mission with an international team of more than 20 partner institutions. APL is managing the [development phase](#), building the spacecraft, and will operate the mission. IMAP is the fifth

mission in NASA's Solar Terrestrial Probes (STP) Program portfolio. The Explorers and Heliophysics Projects Division at NASA's Goddard Space Flight Center in Greenbelt, Maryland, manages the STP Program for the agency's Heliophysics Division of NASA's Science Mission Directorate.

More information: For more information about IMAP visit:
<https://imap.princeton.edu>

Provided by NASA's Goddard Space Flight Center

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