

Particle Physics Mission Celebrates One Year In Space

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Image Credit: NASA

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Physicists around the world are celebrating the one year anniversary of the Alpha Magnetic Spectrometer (AMS).

The final crew aboard space shuttle Endeavour brought AMS to the International Space Station (ISS) [during the STS-134 mission last year](#).

Since being installed on the orbiting lab, the particle physics experiment module has collected about 17 billion cosmic ray events.

[“The AMS detector has so far achieved everything we expected of it,”](#) Nobel laureate and AMS spokesperson Samuel Ting said in a statement. “That’s a great credit to the team that put the detector together, and the team that installed it on the ISS. We’re honored to have them here today to celebrate AMS’s first year in space.”

Data gathered by AMS is received by NASA in Houston, and relayed back to the AMS Payload Operations Control Center (POCC) at CERN for analysis.

CERN said that during AMS' first year in space, scientists have had to calibrate the detector and better understand its performance in the extreme thermal conditions encountered in space.

"Among AMS's achievements is that for the first time, we've been able to identify electrons with energies exceeding 1 TeV before they enter the atmosphere," Ting said in the statement. "This holds out great promise for the AMS research program that's now getting underway."

Ting held a press conference, along with mission commander Mark Kelly, CERN Director-General Rolf Heuer and ESA Director for Science Alvaro Giménez Cañete at the AMS POCC.

A ceremony embracing the first year AMS has been working in space was also held, complete with a tree-planting demonstration and a commemorative plaque unveiling on the lawn outside the POCC.

On Wednesday afternoon, astronauts will give a presentation for over 200 undergraduate summer students from 71 nations who are currently at CERN getting a taste of what life is like at the European nuclear research organization.

"It's a real privilege to visit CERN today, and we're proud to have played a part in launching the AMS experiment's fascinating research program," Kelly said in a press release. "Meeting some of the young summer students who represent the future of science and engineering was a highlight."

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