

. STATION NEWS

Roberto Vittori's DAMA Mission To ISS

by Staff Writers

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ESA astronaut Roberto Vittori is set to fly on the next [Space Shuttle](#) mission in late April to deliver the large Alpha Magnetic Spectrometer [science](#) payload to the International Space Station. Dedicated [web](#) pages have been launched to spotlight Roberto's 'DAMA' mission.



ESA astronaut Roberto Vittori.

Roberto is a Mission Specialist on the six-astronaut team flying on the final voyage of Space Shuttle Endeavour. STS-134 is the spaceplane's penultimate mission, and Roberto will be the last European - and last non-American - to fly on this venerable vehicle. The launch of Endeavour is planned for 29 April.

The mission will make some of the last deliveries to the Station. The AMS-02 alpha magnetic spectrometer is a state-of-the-art cosmic-ray detector designed to examine fundamental aspects of matter and the origin of the Universe.

AMS-02 will not only be the largest and most complex scientific instrument to be [installed](#) on the Station, but it is also the largest international collaboration on a single experiment in space.

Endeavour will also deliver the third Express Logistics Carrier, which holds a pair of communication antennas, a high-pressure oxygen tank, an extra ammonia coolant reservoir and a new piece for the two-armed Dextre robot.

Four spacewalks will put everything in place in the last sorties of the Shuttle era.

Roberto will lift AMS-02 with the Shuttle [robotic](#) arm from the payload bay and berth it on the Station for final installation. He will also meet his ESA colleague Paolo Nespoli, who is already aboard on his long MagISStra mission.

In total, 12 astronauts will share ten hectic days on the Station packed with scientific and logistics activities.

The DAMA mission sets a new European record: Roberto is the first ESA astronaut to fly to the Station for the third time in his space career.