



SPACE

LISA PATHFINDER: MISSION ACCOMPLISHED

Scientists of the international Lisa Pathfinder collaboration met in Trento to celebrate the success of the Lisa Pathfinder mission and to discuss the scientific results achieved over the past ten years.

The event, which took place on 11 and 12 September, was hosted by the MUSE - Museum of Sciences of Trento and it was jointly promoted by the European Space Agency (ESA), the Italian Space Agency (ASI), INFN, the University of Trento and MUSE. The LISA Pathfinder mission of the European Space Agency (ESA), launched in December 2015 and ended in June of last year, has allowed us to open a new path to the exploration of the universe. It tested the concept of gravitational wave detection from space, demonstrating that the movement of two test masses (in gold-platinum alloy) in almost perfect gravitational free fall can be controlled and measured with very high precision. LISA Pathfinder thus paved the way for the construction of the real LISA (Laser Interferometer Space Antenna) space observatory, whose launch in orbit is expected in 2034. This is a new ambitious goal that ESA has foreseen among the three most extensive missions in its development program (Cosmic Vision) for the next twenty years. The final phase of LISA Pathfinder operations will officially terminate at the end of 2018 but the precious scientific data it has produced will be analysed and exploited for a long time. ■