

Title- Solar Orbiter: Joint Mission to Study the Sun

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Abstract:

This mission to explore the Sun-Heliosphere connection is the first medium-class mission of ESA's Cosmic Vision 2015-2025 program and is being jointly implemented with NASA. The dedicated payload of 10 remote-sensing and in-situ instruments will orbit the Sun as close as 0.3 A.U. and will provide measurements from the photosphere into the solar wind. The three-axis stabilized spacecraft will use Venus gravity assists to increase the orbital inclination out of the ecliptic to solar latitudes as high as 34 degrees in the extended mission. Solar Orbiter's science team has been working closely with the Parker Solar Probe (PSP) scientists to coordinate observations between these two highly-complementary missions. In addition to providing a Solar Orbiter status update, I will present the exciting new science opportunities that the synergy between Solar Orbiter and PSP offer in the search to understand the origins of the heliosphere