



Solar Orbiter Mission Status Update

Daniel Mueller (1), Yannis Zouganelis (2), Chris St. Cyr (3), and Holly Gilbert (3)

(1) European Space Agency, SCI-S, Netherlands, (2) European Space Agency, SCI-S, Spain, (3) NASA Goddard Space Flight Center, USA

ESA's next heliophysics mission, Solar Orbiter, will focus on exploring the linkage between the Sun and the heliosphere. It will collect unique data that will allow us to study, e.g., the coupling between macroscopic physical processes to those on kinetic scales, the generation of solar energetic particles and their propagation into the heliosphere and the origin and acceleration of solar wind plasma. By approaching as close as 0.28 AU, Solar Orbiter will view the Sun with high spatial resolution and combine this with in-situ measurements of the surrounding heliosphere. Thanks to its unique out-of-ecliptic orbit, Solar Orbiter will deliver images and data of the unexplored Sun's polar regions and the side of the Sun not visible from Earth. This talk will provide an update on the mission's development status and highlight synergies with NASA's Parker Solar Probe and the heliophysics observatory.