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The Solar Orbiter mission – Exploring the Sun and heliosphere

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Solar Orbiter, launched on 10 February 2020, is a space mission of international collaboration between ESA and NASA. It is exploring the linkage between the Sun and the heliosphere and has started to collect unique data at solar distances down to 0.49 AU. By ultimately approaching as close as 0.28 AU, Solar Orbiter will view the Sun with very high spatial resolution and combine this with in-situ measurements of the surrounding heliosphere. Over the course of the mission, the highly elliptical orbit will get progressively more inclined to the ecliptic plane. Thanks to this new perspective, Solar Orbiter will deliver images and comprehensive data of the unexplored Sun's polar regions and the side of the Sun not visible from Earth. This talk will highlight first science results from Solar Orbiter and provide a mission status update.