



# Encounters with our star: Solar Orbiter and Parker Solar Probe

Plenary Session

 Monday, June 27th 2022  16:30 - 17:00  AUDITORIUM 1

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Of the hundreds of thousands of millions of stars in the Milky Way, the Sun is the closest to us. Its knowledge is not only important to stellar studies and some other astrophysical phenomena, it is also of paramount relevance to life on this planet. With the dawn of this century, two “explorers” were launched with the aim of shedding some light on some of the mysteries still pending about our star, thanks to close encounters with the Sun and out-of-ecliptic observations of the solar poles. Solar Orbiter, an ESA mission in collaboration with NASA, was launched on February 10th 2020. It will observe the Sun from a closest approach of 0.28 au and out of ecliptic plane up to 34 degrees of latitude. Parker Solar Probe, a NASA mission, will dive inside the solar corona down to a closest distance to the Sun of 9 solar radii. In this talk, I will present both missions and give a summary of the most relevant discoveries that have been reported so far, bearing in mind that their most exciting phases are yet to come.