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First Results from Solar Orbiter's Energetic Particle Detector

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In this presentation, we will show the first measurements performed by EPD since the end of the commissioning phase until the latest results obtained. During these months EPD has been scanning the inner heliosphere at different heliocentric distances and heliolongitues allowing - together with other spacecraft - to investigate the spatio-temporal behavior of the particle populations in the inner heliosphere during solar minimum conditions. Solar Orbiter was launched from Cape Canaveral on February 10th, 2020, thus beginning the journey to its encounter with the Sun. Solar Orbiter carries ten scientific instruments, six remote sensing and four in situ, that will allow the mission main goal: how the Sun creates and controls the heliosphere. Among the in situ instruments, the Energetic Particle Detector (EPD) measures electrons, protons and heavy ions with high temporal resolution over a wide energy range, from suprathermal energies up to several hundreds of MeV/nucleon.

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