



Contribution ID: 432

Type: Poster

## A CME followed by a prominence eruption as observed by the remote sensing instruments on-board Solar Orbiter

Monday, 6 September 2021 10:45 (13 minutes)

On February 12, 2021 two subsequent eruptions occurred above the West limb, as seen along the Sun-Earth line. The first event appeared in the SOHO/LASCO-C2 images as a typical Coronal Mass Ejection (CME), starting around 12:48 UT with a projected speed on the order of 120 km/s, as provided by CACTUS catalog. This slow CME was followed ~7 hours later by a smaller and collimated prominence eruption, originating Southward with respect to the CME, and propagating much faster at ~380 km/s. Interestingly, these two events were also observed not only by STEREO-A, but also by remote sensing instruments on-board Solar Orbiter, located at about 163 deg of separation angle from the Earth, hence observed the eruptions above the East limb. The two events were first observed by the SoloEUI imager, then crossed the field-of-view of the SoloMetis coronagraph, being finally observed by the SoloHI instrument. From the Solar Orbiter perspective the different source regions of the two eruptions were located just behind the limb, as suggested by SDO/AIA images, but the EUI imager followed very well the expansion of the prominence eruption. The Metis images show both in the VL and UV channels a faint but classical three-part structure CME, followed by a brighter plasma blob associated with the prominence eruption. The southward part of the CME was also observed higher up by SoloHI, while the prominence eruption (expanding more northward) was probably missed. This presentation will summarize the first results from the analysis of these two interesting events.

### Student poster?

**Primary authors:** Dr BEMPORAD, Alessandro (Istituto Nazionale di Astrofisica (INAF)); ANDRETTA, Vincenzo (Istituto Nazionale di Astrofisica (INAF)); LANDINI, Federico (Istituto Nazionale di Astrofisica (INAF)); Prof. ROMOLI, Marco (Università di Firenze); Dr SUSINO, Roberto (Istituto Nazionale di Astrofisica (INAF)); SPADARO, Daniele (Istituto Nazionale di Astrofisica (INAF)); SASSO, Clementina (Istituto Nazionale di Astrofisica (INAF)); Dr MIERLA, Marilena (Royal Observatory of Belgium); BERGHMANS, David (Royal Observatory of Belgium); Dr D' HUYS, Elke (Solar-Terrestrial Centre of Excellence - SIDC, Royal Observatory of Belgium, Avenue Circulaire 3, Brussels1180, Belgium); Dr ZHUKOV, Andrei (Royal Observatory of Belgium); TALPEANU, Dana-Camelia (KU Leuven, ROB); Dr COLANINNO, Robin (U.S. Naval Research Laboratory); Dr HESS, Phillip (U.S. Naval Research Laboratory, Washington, D.C)

**Presenter:** Dr BEMPORAD, Alessandro (Istituto Nazionale di Astrofisica (INAF))

**Session Classification:** Poster Session 1.5

**Track Classification:** Session 4 - From Radio to Gamma Rays: Near-Sun Manifestations and Triggering of Solar Flares and Coronal Mass Ejections