Orlando
Romeo
Space Sciences Laboratory - University of California, Berkeley
Samuel Badman, Center for Astrophysics | Harvard & Smithsonian
Yeimy Rivera, Center for Astrophysics | Harvard & Smithsonian
Davin Larson, Space Sciences Laboratory, University of California Berkeley
Roberto Livi, Space Sciences Laboratory, University of California Berkeley
Phyllis Whittlesey, Space Sciences Laboratory, University of California Berkeley
Ali Rahmati, Space Sciences Laboratory, University of California Berkeley
Mike Stevens, Center for Astrophysics | Harvard & Smithsonian
Jia Huang, Space Sciences Laboratory, University of California Berkeley
Samer Alnussirat, Space Sciences Laboratory, University of California Berkeley
Mingzhe Liu, Space Sciences Laboratory, University of California Berkeley
Marc Pulupa, Space Sciences Laboratory, University of California Berkeley
Stuart Bale, Space Sciences Laboratory, University of California Berkeley
Nour Rawafi, Johns Hopkins University Applied Physics Laboratory
Poster
On August 30th, 2025, an asymmetrical halo coronal mass ejection (CME) erupted from the near side of the Sun relative to Earth. This event was observed remotely and in situ by multiple spacecraft, including Parker Solar Probe (PSP). PSP was located near the Sun-Earth line at a heliocentric distance of about 108 solar radii when the CME arrived at the spacecraft on August 31st at approximately 17:17 UTC. We present in situ proton and alpha particle measurements from the Solar Probe ANalyzer for Ions (SPAN-I) and Solar Probe Cup (SPC) instruments, along with electron observations from the Solar Probe ANalyzer for Electrons (SPAN-E) instrument. Following calibration, plasma density estimates derived from SPC, SPAN-E, and quasi-thermal noise (QTN) spectroscopy from the FIELDS instrument show good agreement. The CME passage at PSP is characterized by enhancements in plasma density, temperature, and bulk speed, coherent magnetic field rotations, and intervals of low plasma beta. When combined with near-Earth in situ and remote measurements, such as PUNCH observations, this event enables future multi-point studies of CME evolution, providing constraints on changes in morphology and dynamics during propagation from the Sun to 1 AU. In addition, the location of PSP halfway between the Sun and Earth could improve CME arrival time estimates for this event and enhance space weather predictions.
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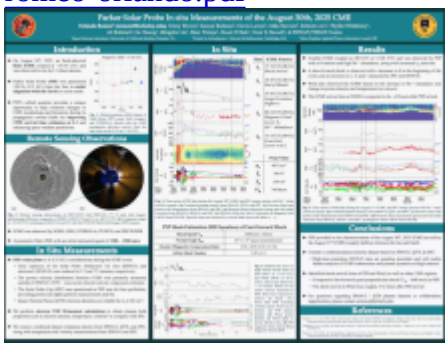
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