17th European Solar Physics Meeting ESPM-17



Contribution ID: 174

Type: Poster

Reconnection within the erupting flux rope during a solar flare

We present indications of reconnection within the erupting flux rope which occurred during the impulsive phase of the Apr 2, 2022 flare. Combining data from ground-based radiospectrometers, EUV and X-ray data from different vantage points (STEREO, AIA/SDO, EUI/Solar Orbiter, STIX/Solar Orbiter, Fermi), we show that rare and unique radio bursts in the GHz frequency range are co-temporal with specific EUV structures. In addition, the X-ray sources are related to hot EUV loops and footpoints that are all located near or inside the magnetic rope and the erupting filament.

Primary authors: KASPAROVA, Jana; DUDIK, Jaroslav (Astronomical Institute of the Czech Academy of Sciences); KARLICKÝ, Marian (Astronomical Institute ASCR); MASSA, Paolo (Dipartimento di Matematica, Università di Genova); KRUCKER, Sam (FHNW School of Engineering); Dr ZEMANOVA, Alena (Astronomical Institute, Czech Academy of Sciences)

Session Classification: Coffee break and poster session 2

Track Classification: Multi-scale energy release, flares and coronal mass ejections