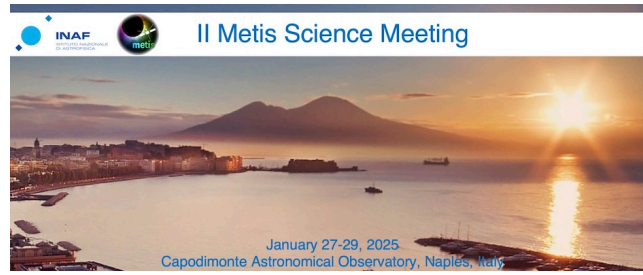


2nd Metis Science Meeting



Contribution ID: 20

Type: **not specified**

Can we extract F-corona from Metis data?

The photospheric radiation scattered by dust particles in the vicinity of the Sun is known as the F-corona. The brightness of the F-corona dominates over the K-corona at distances greater than approximately 3 solar radii. For coronagraphs orbiting in the ecliptic plane at similar distances from the Sun, such as Stereo/Secchi and SOHO/LASCO, deriving the F-corona is relatively straightforward due to its low spatial and temporal variability. In contrast, Metis has an elliptical orbit with a higher inclination relative to the ecliptic, and its observations lack regularity. By employing a dust scattering model and utilizing unpolarized coronal images (Metis tB), we show how to derive the F-corona. This approach is valuable for characterizing the properties of the F-corona at short heliocentric distances and at higher latitudes above the ecliptic.

Primary author: Prof. ROMOLI, Marco (Università di Firenze)

Co-authors: BURTOVOI, Aleksandr (Istituto Nazionale di Astrofisica (INAF)); DE LEO, Yara (Istituto Nazionale di Astrofisica (INAF)); LANDINI, Federico (Istituto Nazionale di Astrofisica (INAF))

Presenter: Prof. ROMOLI, Marco (Università di Firenze)

Session Classification: Metis Science - Short communications