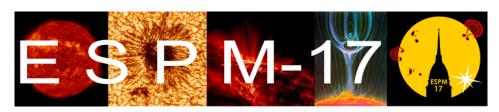
## 17th European Solar Physics Meeting ESPM-17



Contribution ID: 275 Type: Poster

## The imaging evidence of low-energy cutoff and the status of spectral cross-calibration of HXI

In this talk, I will show the method to confirm the existence of the nonthermal component down to 6.5 keV in the observed X-ray spectrum of a microflare first reported by Glesener et al., 2020. We report the first imaging evidence for low-energy cutoff of energetic electrons in EM maps of >10 MK plasma, which first appeared as two coronal sources significantly above the chromospheric footpoints. This study reveals the important role of electron thermalization and low-energy cutoffs in the physical processes of microflares. The other topic is about the spectral cross-calibration of HXI onboard ASO-S. Cross calibration of different X-ray instruments is essential for solar X-ray joint studies and is particularly important for studies of X-ray directivity and 3-dimensional properties of HXR sources. I will present the preliminary results of the detector spectral calibrations of ASO-S/HXI by investigating its three total flux detectors, and cross-calibrations using SolO/STIX, Fermi/GBM, and Konus-Wind data. Although it is challenging to perform joint observation studies due to several factors, the close fit of the X-ray observations from different instruments still indicates a favorable perspective for joint studies.

Primary author: LI, Zhentong (Purple Mountain Observatory)

**Co-authors:** VERONIG, Astrid (University of Graz); Dr YU, Fu (Purple Mountain Observatory); Dr CHEN, Wei (Purple Mountain Observatory); Dr GAN, Weiqun (Purple Mountain Observatory); Dr SU, Yang (Purple Mountain Observatory)

**Session Classification:** Coffee break and poster session 2

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