

"AN EXPLORATION OF THE EMISSION PROPERTIES OF X-RAY BRIGHT POINTS SEEN WITH SDO"

S. H. Saar (SAO), T. Elsden (St. Andrews), K. Muglach (GSFC)

We present preliminary results of a study of X-ray Bright Point (XBP) EUV emission and its dependence on other properties. The XBPs were located using a new, automated XBP finder for AIA developed as part of the Feature Finding Team for SDO Computer Vision. We analyze XBPs near disk center, comparing AIA EUV fluxes, HMI LOS magnetic fields, and photospheric flow fields (derived from HMI data) to look for relationships between XBP emission, magnetic flux, velocity fields, and XBP local environment. We find some evidence for differences in the mean XBP temperature with environment. Unsigned magnetic flux is correlated with XBP emission, though other parameters play a role. The majority of XBP footpoints are approaching each other, though at a slight angle from head-on on average. We discuss the results in the context of XBP heating.