Ritesh
Patel
Southwest Research Institute, Boulder
Matthew J. West, SwRI Boulder
Marcus Hughes, SwRI Boulder
Chris Lowder, SwRI Boulder
Daniel B. Seaton, SwRI Boulder
Craig DeForest, SwRI Boulder
Poster
PUNCH will take white-light polarimetric observations of the outer solar corona and the heliosphere with a wide field of view of 90 degree. PUNCH science is based on the physics of Thomson scattering to derive 3D information about the corona and associated transients while relating the dynamics from outer corona to heliosphere. An important aspect is combining the polarized observations taken at polarizer angles of -60, 0 and +60 degrees while the satellites are in motion around the Earth. This implies that the polarization has to be resolved based on continuously varying reference frame and hence conventional measurements such as Stokes parameters need to be modified accordingly. Moreover, the wide field PUNCH also induces the challenge of resolving proper polarizing angles which was identified in an IMAX 3D show. In this presentation, I will give an overview of this widest polarizer based imager and the anticipated effects similar to an IMAX screen on PUNCH data. I will also discuss the tool to resolve polarization in PUNCH, solpolpy, challenges due to the IMAX effect on this and its applicability on different datasets.
Poster PDF
patel-PUNCH4.pdf
Meeting homepage
PUNCH 4 Science Meeting
Download to PDF