Craig
DeForest
SwRI
Sarah Gibson, UCAR
Ronnie Killough, SwRI
Traci Case, SwRI
Alan Henry, SwRI
Matt Beasley, SwRI
Dan Seaton, SwRI
Robin Colaninno, NRL
Glenn Laurent, SwRI
Mary Hanson, SwRI
The PUNCH Development and Science Teams
Oral
(Invited Talk)
The Polarimeter to UNify the Corona and Heliosphere is a wide-field imager to view the corona and heliosphere seamlessly. Paradoxically, it accomplishes this by stitching together images from four separate cameras. The mission and instruments are designed specifically to produce data that can be merged smoothly without gaps. Four separate spacecraft each carry one camera: one coronagraph (“Narrow Field Imager”) and three separate heliospheric-imager (“Wide Field Imager”) cameras. All four cameras orbit Earth over the sunrise/sunset terminator, and photograph the inner solar system once every four minutes. The images are merged on the ground into seamless data products. PUNCH data operates in synoptic mode (no campaigns) and data made available to everyone immediately. PUNCH is in a combined Phase C/D and is nearly ready for observatory integration, with Pre-Environmental Review scheduled for early fall 2023. Launch is slated for Spring 2025, on a ride-share with SPHEREx from Vandenberg Space Force Base, aboard a Falcon 9. PUNCH polarization data are specifically designed for 3-D imaging of the corona, the solar wind, CMEs, and shocks — from a single viewpoint.
Presentation file
1_Craig_DeForest.pdf
YouTube link
View Video
Meeting homepage
PUNCH 4 Science Meeting
Download to PDF