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Oral
(Invited Talk)
UCSD’s iterative time dependent three dimensional (3-D) reconstruction program has characterized the topology throughout the inner heliosphere based on interplanetary scintillation (IPS) and Thomson scattering brightness observations. Using Solar Mass Ejection Imager (SMEI), and STEREO Heliospheric Imager (HI) brightness, we have worked to provide a system that uses these instrument’s full line of sight (LoS) capability in our iterative programming. This system has now been modified to provide pseudo Thomson-scattering polarization brightness from the volumetric density data as is intended from PUNCH. With both brightness and polarization brightness we then provide an iterative system that can use either type measurement, or the difference from the two types of imagery to again provide the same volumetric elements. Tests continue with this analysis to learn how well sources of LoS noise and missing data affects the reconstruction of the density volumes.
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