Francesco Pecora University of Delaware Yan Yang, University of Delaware Sarah Gibson, HAO, NCAR Nicholeen Viall, NASA Goddard Rohit Chhiber, University of Delaware, NASA Goddard Craig DeForest, Southwest Research Institute William H. Matthaeus, University of Delaware Oral

(Invited Talk)

The upcoming PUNCH mission will resolve macroscopic features of the inner heliosphere but also admit sufficiently high spatial resolution to probe scales of turbulence well in the inertial range.

As PUNCH launch approaches, it is important to have beforehand a benchmark of what observations will look like and how they can be directly related to the turbulent environment of the lower corona. We present a numerical study that combines magnetohydrodynamics simulations of turbulence together with forward synthesis of white-light data to probe the algorithm's capability of reconstructing mass density fluctuations along PUNCH lines of sight.

Presentation file <u>13_F_Pecora.pdf</u> YouTube link <u>View Video</u> Meeting homepage <u>PUNCH 4 Science Meeting</u> <u>Download to PDF</u>