Francesco
Pecora
University of Delaware
Yan Yang, University of Delaware
Sarah Gibson, National Center for Atmospheric Research (NCAR)
Nicholeen M. Viall, NASA Goddard Space Flight Center
Rohit Chhiber, University of Delaware, NASA Goddard Space Flight Center
Craig DeForest, Southwest Research Institute
William Matthaeus, University of Delaware
Poster
The Polarimeter to UNify the Corona and Heliosphere (PUNCH) will image macroscopic features of the inner heliosphere and also admit sufficiently high spatial resolution to probe scales of turbulence within the upper end of the inertial range, close to the integral scale.
Because PUNCH is an imager, the measurements it will make relate differently to the underlying turbulent environment of the outer corona and inner heliosphere than do more familiar in-situ samples. We present a numerical study that combines magnetohydrodynamic simulations of turbulence together with forward-modeling synthesis of white-light data via the FORWARD code. We show that (i) the ``usual" turbulence scalings are modified by the integration along the line of sight in an optically thin medium, and (ii) those scalings are still linked to the original properties of the turbulent field. This study is a first step in the process of analyzing and understanding the unprecedented information that PUNCH will provide.
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