Craig
DeForest
SwRI
Oral
Corotating interaction regions have been studied primarily through in-situ analysis, which has nearly opposite strengths to those of imaging. The very few CIR movies that have been prepared (using STEREO/HI-2 data) are enigmatic and offer a large "discovery space" for new phenomena, including shock formation, possible large-scale propagating waves, new probes of solar wind behavior, gradual quasi-stationary (or not) shock evolution from nearly-shear to nearly-perpendicular geometry, and even large scale geometric evolution. We need to ask ourselves not only, what can PUNCH do to reveal these not-so-gentle giants of the heliosphere -- but also, what can PUNCH *not* do well? Failure to ask similar questions, in advance, has led to many missteps across decades of coronal imaging analysis. By modeling the rudiments of these exciting features and working to understand the "null space" of our imaging measurements, we can avoid overinterpretation or pigeonholing of the results we find. I'll present some thoughts on how to proceed so that we are ready to interpret PUNCH data when they arrive.
Meeting name
PUNCH 2 Science Meeting
Download to PDF