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Measurement of Single Spin Asymmetries between W-Boson Yields in Polarized pp Collisions at PHENIX DANIEL JUMPER, University of Illinois at Urbana Champaign, PHENIX COLLABORATION — The PHENIX experiment at RHIC has a goal of better constraining the quark and antiquark contributions to the spin of the proton. This is accomplished by measuring parity violating single helicity asymmetries between muon yields stemming from W boson decay at forward and backward rapidity, $1.2 < |\eta| < 2.4$ at a center of mass energy of $\sqrt{s} = 500GeV$ with beams of longitudinally polarized proton colliding. Data toward this measurement has been accumulated over 3 years totaling about $310pb^{-1}$ integrated luminosity over the full collision vertex range, with the largest contribution of $240pb^{-1}$ taken in 2013 with an average polarization of 56%. This talk will present the status of the ongoing analysis of the 2013 data. Discussion will focus on calculating and testing asymmetries after signal events are extracted from the data set.

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