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Sivers Asymmetries in Polarized Drell-Yan Production of Muon Pairs at COMPASS IHNJEA CHOI, University of Illinois at Urbana-Champaign, COMPAS COLLABORATION — The COMPASS experiment is a fixed target experiment located at the M2 beam line of the CERN SPS, which provides muon and hadron beams for the investigation of longitudinal and transverse spin structure of the nucleon and hadron spectroscopy. Recently, a new proposal of the COMPASS collaboration has been accepted at CERN. A main objective of the COMPASS II proposal is to probe transverse momentum dependent (TMD) parton distributions of the nucleon through the Drell-Yan process with negative poion beams incident on polarized proton targets. The measurement of Sivers asymmetries in Drell-Yan production of muon pairs will test the predicted sign change of Sivers single spin asymmetries between semi inclusive scattering experiments with lepton beams on polarized targets and the Drell-Yan process with hadron beam and target. In this presentation we will discuss the physics motivation of the COMPASS II Drell-Yan measurement, present sensitivity projections and discuss the status of the absorber and spectrometer underway for the proposed Drell-Yan measurement.

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