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**A New Large Area Drift Chamber for Drell-Yan Measurements in a High Rate Background Environment with the COMPASS Experiment at CERN** PEDRO MONTUENGA, University of Illinois at Urbana-Champaign, COMPASS COLLABORATION — The COMPASS experiment at CERN intends to study transverse momentum dependent quark Sivers distributions in the nucleon through the Drell-Yan process in pion collisions against polarized proton targets. The measurement will require two new stations of drift chambers for the Large Angle Spectrometer (LAS) in COMPASS. The detector will consist of two planar drift chamber stations with 8 wire planes each and a position resolution of  $250\ \mu\text{m}$  per plane. The high rate background environment requires a small pitch of 8 mm between sense wires. In this talk we will discuss the detector design, simulation studies with GARFIELD and the construction and test of a prototype at the UIUC Nuclear Physics Laboratory.

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