Abstract Submitted
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Polarized Drell-Yan at SpinQuest/ Fermilab E1039[1] NOAH WUERFEL[2], Univ of Michigan - Ann Arbor, SPINQUEST COLLABORATION — The SpinQuest (Fermilab E1039) experiment will measure an azimuthal asymmetry in the Drell-Yan production of $\mu+$ $\mu-$ pairs from 120 GeV/c proton interactions with polarized nucleons to extract the Sivers function for $\bar{u}$ and $\bar{d}$. A nonzero asymmetry would be smoking gun evidence for orbital angular momentum of the light sea-quarks: a possible contributor to the protons spin. Measurements of a transverse single spin asymmetry in the J/Ψ background would also serve to constrain the gluon Sivers function over $0.05 < x_{target} < 0.2$. The polarized target, developed by Los Alamos National Labs and University of Virginia, uses Dynamic Nuclear Polarization to reach an average proton target polarization over 80%. After a brief introduction to the E1039 experimental apparatus and target, I will discuss upcoming physics at SpinQuest.

[1]This work is partially supported by the US National Science Foundation under grant NSF PHY-1807338.
[2]I previously submitted an abstract, but after doing so, my Advisor suggested I offer an abstract for a general talk- as no one else in our collaboration had yet done so. Sorry for any confusion with the double submission.

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