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Writing of a GEANT4 simulation of E906 at FNAL Main Injector ALDO RAELIARIJAONA, Abilene Christian University, E866/NUSEA COLLAB-ORATION — Following Fermilab E866/NuSea, which determined the light antiquark asymmetry in the proton, as well as many other results, Fermilab E906 is an experiment that will measure nucleon and nuclear structure at the parton level using Drell-Yan scattering. With significant improvement on statistical errors above Bjorken x = 0.2, E906 will go further than the E866/NuSea could on measurements. In order to improve modeling for E906 a new GEANT4 simulation was created in a new code, instead of using the old simulation done in FORTRAN in GEANT3. We will report on new calculations to verify the optimal absorber arrangement in the first magnet of the E906 spectrometer.

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