

Abstract Submitted
for the DNP12 Meeting of
The American Physical Society

New Drift Chamber for the SeaQuest Spectrometer RYAN CASTILLO, Abilene Christian University, SEAQUEST/E906 COLLABORATION — SeaQuest (Fermilab E906) is a fixed target experiment that utilizes di-muons produced by the Drell-Yan process using the 120 GeV Main Injector at Fermilab. The main objective of SeaQuest is to measure the anti-down to anti-up quark asymmetry in the nucleon sea by determining total Drell-Yan p+p and p+d cross sections using liquid hydrogen and liquid deuterium targets. It will produce results up to a Bjorken x of 0.45, much larger than its predecessor, NuSea (Fermilab E866). This is only one of several measurements the experiment will make. This presentation will focus on the function, construction, and defining features of a new drift chamber currently being built at Fermilab for the SeaQuest spectrometer. This chamber will replace an old drift chamber recycled from E866 located in the lower half of the spectrometer's third drift chamber station.

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Date submitted: 01 Aug 2012

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