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**Studies on Light Anti-Quark Flavor Asymmetry in the proton at the SeaQuest Experiment** ARUN TADEPALLI, Jefferson Lab, SEAQUEST COLLABORATION — The Fermilab E906 (SeaQuest) is an experiment aimed at studying the anti-quark distributions in nucleons and nuclei. The experiment used a 120 GeV proton beam extracted from the Main Injector at Fermilab. SeaQuest takes advantage of the Drell-Yan process to probe the anti-quark structure in the proton. In the Drell-Yan process, quark from one hadron annihilates with an anti-quark from another hadron, producing a virtual photon which eventually decays into dileptons. The SeaQuest forward spectrometer is designed to detect such dimuons generated by the Drell-Yan process. Ratio of cross-sections of the interaction of proton beam on liquid deuterium and hydrogen targets allows SeaQuest to map out dbar(x)/ubar(x) up to a region of  0.45 in Bjorken-x, a region which hasn't been explored yet. Current status of the analysis will be reported in this talk.

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