Abstract Submitted
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SeaQuest Studies of the EMC Effect - Present Status[1] LARRY DONALD ISENHOWER, Abilene Christian University, SEAQUEST COLLABORATION — SeaQuest (E-906) is a fixed target experiment that uses the 120 GeV proton beam from the Main Injector at Fermilab to study the Drell-Yan process from different targets, including liquid hydrogen and deuterium, tungsten, iron, and carbon. The EMC, European Muon Collaboration, effect was the discovery in 1983 of the modification of quark momentum distributions when nucleons are bound into a nucleus compared to when they are independent particles. There have been many studies on this topic since that time and SeaQuest is also making a study of this process via the Drell-Yan production of di-muons. The experiment consists of a two magnet focusing spectrometer with four separate detector sections. SeaQuest will soon have recorded its complete data set, and its analysis is expected to produce an improved measurement of this effect. The most recent results will be presented, along with what conclusions the complete data set should be capable of reaching in verifying if anti-shadowing is not present in the Drell-Yan process as E-772, a previous Fermilab Experiment, found.

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