

Abstract Submitted  
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**The EMC Effect at SeaQuest**<sup>1</sup> MICHAEL DAUGHERITY, Abilene Christian University, SEAQUEST COLLABORATION — The Fermilab E906/SeaQuest experiment measures dimuons from 120 GeV protons from the Main Injector incident on fixed Hydrogen and Deuterium liquid targets and W, C and Fe solid targets. The yield of these dimuons from Drell-Yan (DY) process and charmonia states is extremely sensitive to the quark structure of nuclei, particularly the light antiquark sea. In 1983 the European Muon Collaboration (EMC) discovered a modification of quark momentum distributions from free nucleons to bound nuclei which has since been well explored in DIS. The DY cross-section ratios of solid to deuterium targets directly measures the nuclear effects of the sea quarks which can distinguish between various models of the nuclear parton distributions and complements DIS results. Recent results will be presented of SeaQuests measurements of the EMC Effect in the  $0.1 < x_B < 0.45$  region.

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