Measuring the ratio of $d/\bar{u}$ in the proton as a function of $x$ at SeaQuest

BRYAN KERNS, University of Illinois Urbana-Champaign, SEAQUEST COLLABORATION — SeaQuest is a running fixed target experiment using Fermilab’s 120 GeV Main Injector proton beam to study the structure of the proton. The comparison of the Drell-Yan cross section ratio for liquid hydrogen and liquid deuterium targets enables an extraction of the ratio of $d/\bar{u}$ at Bjorken $x$ ranging from around 0.1 to 0.45, measuring this quantity at much higher $x$ than previous experiments. SeaQuest has already taken some data in pursuit of this goal but the majority of the data taking lies ahead. A preliminary analysis of this data with the purpose of extracting $d/\bar{u}$ will be presented.