

Abstract Submitted
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The E-906/SeaQuest experiment at Fermilab KUN LIU, Los Alamos National Laboratory, E906/SEAQUEST COLLABORATION — The Fermilab E906/SeaQuest experiment is successor of a series of fixed target Drell-Yan experiments designed to explore the quark and antiquark structure of nucleon and their nuclear modifications when nucleon is embedded in different nuclei. Using the 120 GeV proton beam extracted from Fermilab's main injector, E906/SeaQuest will measure the J/Ψ , Ψ' and Drell-Yan productions in the dimuon mass from 4-9 GeV in p+p and p+A (A=D, C, Fe W) collisions over a wide kinematic range. With these new measurements, we will be able to extend the existing knowledge of down to up antiquark distributions to higher values of Bjorken-x and quantify the cold nuclear medium effects in partonic energy loss and quarkonia production. E906/SeaQuest experiment started its physics data taking in March 2014 to achieve high-precision measurements. This talk will include the status report of the ongoing experiment and preliminary physics results.

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