

Abstract Submitted
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A Study of Quark Energy Loss in p-A Collisions in the Fermilab E906 Experiment¹ MING LIU, Los Alamos National Lab, FERMILAB E906 COLLABORATION — It is believed that the jet suppression observed at RHIC is mainly due to parton energy loss. However, our knowledge of the high energy parton energy loss in nuclear matter is very limited and constitutes one of the largest gaps in our understanding of the fundamental nuclear interactions at relativistic heavy ion collisions. As a consequence, it also hampers the quantitative determination of the properties of the new state of matter created in the relativistic heavy ion collisions at RHIC. A unique opportunity exists today to perform a benchmark measurement at the Fermilab E906 experiment via an active p+A program. The E906 Dimuon Experiment will use Drell-Yan scattering to measure the anti-quark structure of both the nucleon and nucleus, to measure absolute DY cross sections and to examine quark energy loss. The experiment will use the 120GeV proton beam extracted from the Fermilab Main Injector and is scheduled to take data in 2010. In this talk I will briefly discuss our experimental approach how to determine quark energy loss in p+A collisions in the E906 experiment.

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