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Current status of studies on parton energy loss in cold nuclear matter at SeaQuest. MARSHALL SCOTT, Argonne National Laboratory, ARUN TADEPALLI, Jefferson National Laboratory — Parton energy loss in cold nuclear matter is integral to the understanding of interaction of partons with the nuclear medium. By measuring the nuclear modification, R_{pA} , Drell-Yan serves as a clean probe into initial state energy loss due initial state quark-medium interactions and color singlet final state. E906/SeaQuest, a is fixed target Drell-Yan experiment, uses the 120 GeV ($\sqrt{s_{NN}} = 15$ GeV) Main Injector Beam at Fermilab to study the interaction of protons impinging on LH₂, LD₂, C, Fe, and W targets. SeaQuest is uniquely suited to measure this energy loss as the spectrometer acceptance is optimized in the high x_2 range, which minimizes other potential nuclear effects such as nuclear shadowing, and the lower beam energy increases the relative Drell-Yan yield to the charmonium backgrounds. We present recent progress toward this measurement.

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