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The search for color transparency through the A(e, e′p) reaction at 12 GeV[1] MD LATIFUL KABIR, Mississippi State Univ, E12-06-107 COLLABORATION — The suppression of the final-state interactions of a hadron propagating through the nuclear medium at high momentum transfer is known as the color transparency (CT) and is a robust prediction of QCD. The onset of CT is of extreme interest in hadronic physics. For example, the onset of CT is related to the onset of factorization, which is an important requirement for accessing GPDs in deep exclusive meson production. The onset of CT has been observed in mesons, but is unconfirmed for baryons. However an enhancement in the transparency was observed in A(p, 2p) reactions at BNL. The E12-06-107 experiment in Hall-C seeks to measure the proton transparency up to the highest Q^2 achievable using the 12-GeV beam at the Jefferson Lab. The experiment uses SHMS-HMS spectrometer pair to perform the coincidence measurement from the reaction A(e, e′p). The proton momentum range covered in the experiment overlaps with the region where the enhancement was observed at BNL, and hence this experiment will help verify the origins of the enhancement and at the same time search for the onset of CT for protons. I will talk about the current status of the experiment.

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