

Abstract Submitted  
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**Quark Propagation and Hadron Formation in Cold Nuclear Matter** RAPHAEL DUPRE, Argonne National Laboratory, CLAS COLLABORATION  
— After four decades of dedicated experiments, knowledge on the hadronization dynamic remain very limited, this is due to both the model and measurement uncertainties. The question is whether the hadron attenuation observed is due to gluon emission by the colored parton or due to the absorption of colorless prehadron or both. Clarifying this issue is the main goal of several recent experiments. In this talk, I will present recent results from a Jefferson Lab experiment, data were taken using a 5 GeV electron beam on various nuclear targets (deuterium, carbon, aluminum, iron, tin and lead). The large acceptance spectrometer, CLAS in Hall B, permits to detect the scattered electron in coincidence with produced hadrons over a large kinematic range. The focus of the talk will be on semi-inclusive negative pion measurement and their implications on various existing hadronization model. I will conclude with the opportunities these data offers to extract information on the time scale of hadronization and on the gluon content of nuclei.

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