



Contribution ID: 52

Type: **not specified**

Present and Future Studies of Color Transparency and Hadronization in Hall B

Wednesday 5 February 2020 16:35 (25 minutes)

For a complete description of the strong interaction, Quantum Chromodynamics (QCD) must be able to predict the dynamics of the free quarks in the nuclear medium. Put another way, the nucleus is a good laboratory to study the propagation of free quarks and the formation of color-neutral objects. This talk will describe a program at Hall B at the Thomas Jefferson National Accelerator Facility (JLab) to study Color Transparency and Hadronization. Color Transparency is the process of the cancellation of QCD color fields for small singlet system of quarks and gluons and predicts a vanishing of the final state interactions of hadrons with the nuclear medium in exclusive processes at high momentum transfers. Hadronization is the process of forming hadrons out of quarks and gluons, and using various nuclei allows for studies of the propagation time and the formation time. Existing data from CLAS6 and future experiments with CLAS12 will be presented.

Author: Dr WOOD, Michael (Canisius College)

Presenter: Dr WOOD, Michael (Canisius College)

Session Classification: Afternoon