

DIS2023: XXX International Workshop on Deep-Inelastic Scattering and Related Subjects



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Type: **Parallel talk**

Testing Color Forces through the Nuclear EMC Effect

Wednesday, 29 March 2023 11:10 (20 minutes)

I will present a new interpretation of the deviations of the nuclear deep inelastic structure function from the free nucleon one, known as the nuclear EMC effect, based on the non locality of the hard scattering off the bound nucleon. Because of the extended size of the hard probe-quark interaction region, final state interactions between the struck parton and the bound nucleon remnants are not suppressed but generate a term proportional to the moment of a transverse momentum distribution. The size of this contribution is regulated by the amount of nucleon transverse momentum which is enhanced when nucleon short range correlations are taken into account.

Submitted on behalf of a Collaboration?

No

Participate in poster competition?

No

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Track Classification: WG1: Structure Functions and Parton Densities