CTEQ Fall meeting 2024



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Evidence for Modified Quark-Gluon Distributions in Nuclei by Correlated Nucleon Pairs

Thursday 21 November 2024 12:00 (20 minutes)

We extend the QCD Parton Model analysis using a factorized nuclear structure model incorporating individual nucleons and pairs of correlated nucleons. Our analysis of high-energy data from lepton Deep-Inelastic Scattering, Drell-Yan and W/Z production simultaneously extracts the universal effective distribution of quarks and gluons inside correlated nucleon pairs, and their nucleus-specific fractions. Such successful extraction of these universal distributions marks a significant advance in our understanding of nuclear structure properties connecting nucleon- and parton-level quantities.

Would you be interested in giving a 5-minutes flash talk?

Yes

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Session Classification: Public Session