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Three-parton production in inclusive DIS at small x

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Content

We use the spinor helicity formalism to calculate the cross section for production of three partons of a given polarization in Deep Inelastic Scattering (DIS) off proton and nucleus targets at small Bjorken x. The target proton or nucleus is treated as a classical color field (shock wave) from which the produced partons scatter multiple times. The resulting expressions are used to study azimuthal angular correlations between produced partons in order to probe the gluon structure of the target hadron or nucleus as well as to study energy loss in DIS reactions.

Session

Forward Physics and diffraction

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