Diffractive dijets at HERA and EIC using GTMDs

Saturday 20 July 2024 17:30 (15 minutes)

We calculate differential distributions for diffractive dijets production in $ep \to e'p \ jet \ jet$ using off diagonal unintegrated gluon distributions (GTMDs). Different models are used. We concentrate on the contribution of exclusive $q\bar{q}$ dijets.

Results of our calculations are compared to H1 and ZEUS data. In general, except of one GTMD, our results are below the HERA data. This is in contrast to recent results where the normalization was adjusted to some selected distributions and no agreement with other observables was checked. We conclude that the calculated cross sections are only a small part of the measured ones which contain probably also processes with pomeron remnant.

We present also azimuthal correlations between the sum and the difference of dijet transverse momenta. The cuts on transverse momenta of jets generate azimuthal correlations which can be misinterpreted.

Alternate track

I read the instructions above

Yes

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