



Contribution ID: 63

Type: **not specified**

Twist-2 transverse momentum distributions at NNLO in QCD

The factorization theorem for DY and semi-inclusive DIS holds for all leading twist transverse momentum distributions. However a QCD perturbative calculation shows several important characteristics of spin-dependent distributions. We consider all the different spin-dependent distributions which can be matched onto integrated twist-2 functions, focusing on the transversity and pretzelosity distributions. The pretzelosity case is specially relevant because, using a direct perturbative calculation at one loop, we obtain a null result which agrees with the experimental measurements. We show the complete set results of the matching at NLO and the results focusing on transversity and pretzelosity at NNLO.

Authors: GUTIÉRREZ REYES, Daniel (Complutense University of Madrid); SCIMEMI, Ignazio (Universidad Complutense (ES)); VLADIMIROV, Alexey