

# XXVIII International Workshop on Deep Inelastic Scattering and Related Subjects



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## Transverse momentum resummation for Z boson and jets production

*Wednesday, 25 March 2020 10:10 (20 minutes)*

In this talk, I am going to introduce our recent works about TMD factorization and resummation for Z boson tagged jets production at the LHC, which can be used to study the proton TMD structure and QCD factorization violation effects. We investigated jet production with the standard jet axis and also the winner-take-all axis. In the first case, we derived an all-order factorization formula, which allows for the systematic resummation of all large logarithms, including small-R and non-global logarithms(NGLs). In the second case, we find that the azimuthal angle decorrelation is insensitive NGLs, and we resum all large logs at the NNLL level. The corresponding references are 2003.XXXXX, 1905.01335, 1901.09038.

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