

TMD factorization at sub-leading power

Monday 22 May 2023 11:00 (20 minutes)

The transverse momentum dependent (TMD) factorization describes the transverse-momentum differential cross-section in the limit of large virtuality of the probe and fixed other scales. To extend the description to a broader range of scales, one needs to incorporate power corrections. I present an overview of the recent development of power corrections to the TMD factorization, including the factorization at next-to-leading power (at NLO) and the resummation of kinematical power corrections. I demonstrate that the power corrections are essential to account for the data description already at $Q \sim 10\text{GeV}$.

Primary author: VLADIMIROV, Alexey (Universidad Complutense de Madrid)

Co-author: RODINI, Simone

Presenter: VLADIMIROV, Alexey (Universidad Complutense de Madrid)

Session Classification: TMDs