Contribution ID: **66** Type: **not specified**

Small q_T region in the Parton Branching approach

Thursday 3 November 2022 14:40 (15 minutes)

The low transverse momentum, q_T, region of the Drell-Yan (DY) pair is dominated by non-perturbative physics. More precisely, the region where $q_T << m_{DY}$. In approaches based in Collins-Soper-Stermann factorisation the non-perturbative region is treated with the Collins-Soper (CS) kernel. In the Parton Branching (PB) approach, based in the DGLAP evolution equation, the non-perturbative region arises from the large z region, $z \leq 1$, where z is the momentum fraction of outgoing and incoming partons. Here, we present the non-perturbative Sudakov form factor in the PB approach and it's comparison with the CS kernel.

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Session Classification: TMD theory