

Difficulties in the description of Drell–Yan processes at low invariant mass and high transverse momentum

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In this talk, we discuss the transverse momentum distribution of Drell-Yan lepton pairs in fixed-target Drell-Yan experiments.

We show that fixed-order theory underestimates data at large q_T , by an amount that cannot be explained by perturbative truncation errors nor PDF uncertainties. We consider a modification of the standard collinear formalism that includes the effect of intrinsic transverse momentum also at large q_T . This is intended to parametrize possible higher-twist effects which are presently not under theoretical control.

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