Jets for 3D imaging online workshop



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Factorization of $e^+e^- \rightarrow HX$ cross section, differential in P_T and thrust, in the quasi 2-jet limit

The factorization of the cross section for single hadron production in e^+e^- annihilations is highly non trivial when the transverse momentum of the outgoing hadron with respect to the thrust axis is taken into account. In this talk, I will present a scheme that allows to factorize this cross section as a convolution between a computable hard coefficient and a TMD fragmentation function. The cross section will be presented at NLO and NLL accuracy. This scheme also relates the TMD parton densities defined in 1-hadron and in 2-hadron processes, restoring the possibility to perform global phenomenological studies of TMD physics.

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