## XXVII International Workshop on Deep Inelastic Scattering and Related Subjects



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## Applications of the WW-type approximation to SIDIS

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We explore the complete cross-section for the production of unpolarized hadrons in semi-inclusive deepinelastic scattering up to power-suppressed  $\mathcal{O}(1/Q^2)$  terms in the Wandzura–Wilczek-type approximation, which consists in systematically assuming that  $\bar{q}gq$ -correlators are much smaller than  $\bar{q}q$ -correlators. Under the applicability of Wandzura–Wilczek-type approximations, certain relations among TMDs occur which will be used to approximate SIDIS cross-section by a smaller subset of TMDs. We further discuss the applicability of the Wandzura–Wilczek-type approximations on the basis of available data.

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