Abstract Submitted
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Twist-3 Generalized Parton Distributions[1] BRANDON KRIESTEN, SIMONETTA LIUTI, Univ of Virginia — The k_T moment of the generalized transverse momentum distribution (GTMD) describing the orbital motion of quarks in the nucleon, F_{14}, was shown in Refs. [1,2] to be related to a combination of the twist-2 generalized parton distributions (GPDs) H and E, and the twist-3 GPD $\widetilde{E}_{2T}$. We compare the behavior of the GTMD F_{14} and the twist-3 GPD $\widetilde{E}_{2T}$ using an overlap model with and without the contribution of the gauge link. This tests the validity of the Wandzura-Wilczek relation for the twist-3 GPD $\widetilde{E}_{2T}$. [1] A. Rajan, M. Engelhardt and S. Liuti, Phys. Rev. D 98, 074022 (2018). [2] A. Rajan, A. Courtoy, M. Engelhardt, and S. Liuti, Phys. Rev.D94, 034041 (2016), 1601.06117.

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