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## First global extraction of the worm-gear TMD $g_{1T}$

*Friday, October 22, 2021 8:40 AM (18 minutes)*

In this talk, we report on the first simultaneous extraction of the worm-gear function  $g_{1T}$ , one of the eight leading-twist TMDs. The study analyzes HERMES, COMPASS and JLab semi-inclusive deep-inelastic scattering data using Monte Carlo techniques. We provide a comparison of  $g_{1T}$  obtained from this experimental data with lattice QCD calculations, a large  $N_c$  analysis, and the Wandzura-Wilczek-type approximation.

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