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# Role of the gluon Sivers function in $l\,p^{\uparrow} \to l' + J/\psi + X$ at the EIC

*Wednesday 24 March 2021 17:00 (15 minutes)*

We study the Sivers azimuthal asymmetry, and the role of the gluonSivers function (GSF), in inelastic $J/\psi$ leptoproduction, $l\,p^{\uparrow} \to l' + J/\psi + X$ within a phenomenological TMD scheme, known as the generalized parton model (GPM). We adopt the NRQCD effective theory for the quarkonium formation mechanism and employ the colour-gauge invariant version of the GPM to study the effects of final-state interactions on the GSF. We compare our results for the unpolarized cross sections against H1 and ZEUS data, and the maximized Sivers asymmetry with the available data point from the COMPASS Collaboration. We also present estimates for the maximized Sivers asymmetry at the EIC.

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