

DIS2023: XXX International Workshop on Deep-Inelastic Scattering and Related Subjects



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Type: **Parallel talk**

Unraveling anomalies in Deep Virtual Compton Scattering

Tuesday, 28 March 2023 11:10 (20 minutes)

We calculate the one-loop quark box diagrams relevant to polarized and unpolarized Deep Virtual Compton Scattering by introducing an off-forward momentum l'' as an infrared regulator. Such a regularization enables us to unravel the poles $1/l^2$ related to the chiral anomaly in the polarized case and the trace anomaly in the unpolarized case. We interpret our results in terms of the relevant Generalized Parton Distributions, and discuss the implications of the poles on the QCD factorization for Compton amplitudes.

Submitted on behalf of a Collaboration?

No

Participate in poster competition?

Primary authors: BHATTACHARYA, Shohini (Brookhaven National Laboratory); Dr HATTA, yoshitaka (BNL); VOGELSANG, Werner (Science and Technology Facilities Council STFC (GB))

Presenter: BHATTACHARYA, Shohini (Brookhaven National Laboratory)

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