Contribution ID: **63** Type: **Oral**

Kinematic power corrections to DVCS to twist-six accuracy

Tuesday, 26 November 2024 16:00 (30 minutes)

In this talk, I will present our calculation of kinematic power corrections t/Q^2 and m^2/Q^2 to the amplitude of deeply-virtual Compton scattering to the twist-six accuracy on a nucleon target.

Phenomenologically, this result reduces an important source of uncertainties in the QCD predictions for intermediate momentum transfers $Q^2 \sim 1 - 10\ \mathrm{GeV}^2$, accessible in the existing and planned EIC experiments. In particular, we find the higher kinematic power–corrections are significant and must be considered in the data analysis.

Our calculation is carried out using techniques from conformal theory and the corresponding results are applicable to other exclusive processes involving light-ray operators.

Primary authors: Prof. BRAUN, Vladimir (University of Regensburg); JI, Yao (The Chinese University of Hong Kong, Shenzhen); Dr MANASHOV, Alexander (University of Hamburg)

Presenter: JI, Yao (The Chinese University of Hong Kong, Shenzhen)

Session Classification: Parallel-3