



Contribution ID: 5

Type: **not specified**

## The Electron Ion Collider and gluon imaging using azimuthal correlations at the EIC

*Wednesday, 13 October 2021 15:15 (20 minutes)*

We calculate azimuthal correlations between the exclusively produced virtual photon or vector meson and the scattered electron in Deep Inelastic Scattering processes at the future Electron-Ion Collider (EIC). We identify “kinematical” and “intrinsic” contributions to these correlations. Performing explicit calculations within the Color Glass Condensate framework we show that the correlations are sensitive to the non-trivial spatial correlations in the gluon distribution of the target, and that significant azimuthal modulations could be measured at the future EIC.

**Primary author:** MÄNTYSAARI, Heikki (University of Jyväskylä)

**Co-authors:** Dr SCHENKE, Björn (BNL); Dr SALAZAR, Farid (Stony Brook); Dr ROY, Kaushik (Max Planck Inst.)

**Presenter:** MÄNTYSAARI, Heikki (University of Jyväskylä)

**Session Classification:** WG4: small-x and diffraction

**Track Classification:** WG4: Small-x and Diffraction