



Contribution ID: 41

Type: **not specified**

## On NLO BFKL impact factors from NLO collinear amplitudes

*Sunday, 25 September 2022 17:00 (20 minutes)*

We construct a framework that may be used to compute NLO  $k_T$ -dependent impact factors from NLO on-shell parton scattering amplitudes. The key point of the method is an extension to the NLO accuracy of the auxiliary parton method commonly used in the LO calculations. With the high energy (Regge) factorization at the NLO, the collinear scattering amplitudes are decomposed into the NLO impact factors and the Green's function coming from the QCD evolution. We describe in detail the treatment in the  $k_T$  factorization of infrared singularities that appear in the NLO collinear amplitudes.

**Presenter:** MOTYKA, Leszek

**Session Classification:** Recent theoretical results on QCD and saturation

**Track Classification:** Recent theoretical results on QCD and saturation