

## SCET Workshop 2022



Contribution ID: 31

Type: **not specified**

# Pseudo- and quasi-PDFs in the BFKL approximation (remote)

*Thursday, 21 April 2022 17:00 (20 minutes)*

To calculate the PDFs from first principles in Lattice gauge theories it is convenient to consider the Ioffe-time distribution defined through gauge-invariant bi-local operators with spacelike separation. Lattice calculations provide values for a limited range of the distance separating the bi-local operators. In order to perform the Fourier transform and obtain the pseudo- and the quasi-PDFs, it is then necessary to extrapolate the large-distance behavior.

I will discuss the formalism one may use to study the behavior of the Ioffe-time distribution at large distances and show that the pseudo-PDF and quasi-PDF are very different in this regime. Using light-ray operators, I will also show that the higher twist corrections of the quasi-PDF come in not as inverse powers of  $P$  but as inverse powers of  $x_B P$ .

**Primary author:** CHIRILLI, Giovanni Antonio

**Presenter:** CHIRILLI, Giovanni Antonio

**Session Classification:** TMDs and PDFs