## **Resummation, Evolution, Factorization 2022**



Contribution ID: 88

Type: not specified

## A new approach to color-coherent parton evolution

Monday 31 October 2022 15:50 (15 minutes)

In this talk I will review the basics of color-coherent parton evolution and the emergence of angular ordering. I will then introduce an alternative way to reproduce the soft-gluon radiation pattern at single-emission level in a parton shower. After a brief discussion of analytic NLL resummation for event shapes in electron-positron collisions, I will present a new type of parton-shower kinematics mapping which satisfies the requirements needed to perform NLL resummation numerically. I will conclude with a brief discussion of future directions in the development of the novel algorithms.

Primary author: HOECHE, Stefan (Fermi National Accelerator Laboratory)Presenter: HOECHE, Stefan (Fermi National Accelerator Laboratory)Session Classification: Parton shower systematics and TMDs