



Contribution ID: 429

Type: Talk

A novel approach to understand the color structure of multiparton scattering amplitudes

Wednesday 14 December 2022 11:30 (15 minutes)

The Soft function that captures the IR singularity of scattering amplitudes exponentiates and the soft anomalous dimension Γ_s sits in the exponent. Γ_s can be expressed in terms of sets of Feynman diagrams known as Cwebs. The color of Diagrams in a Cweb mix through Cweb mixing matrices.

In this talk I present a novel approach for the calculation of these matrices which makes the structures present in them transparent and also enables us to make predictions to all orders in perturbation theory for several classes of Cwebs.

Session

Heavy Ions and QCD

Author: SRIVASTAV, aditya

Co-authors: Dr TRIPATHI, Anurag (Indian Institute of Technology Hyderabad); Dr AGARWAL, Neelima (Chaitanya Bharathi Institute of Technology, Hyderabad); PAL, Sourav

Presenter: SRIVASTAV, aditya

Session Classification: WG5-Heavy Ions and QCD