Contribution ID: 23 Type: not specified

Decomposition of QCD splitting functions into scalar radiators and pure remainders

Tuesday 15 July 2025 16:00 (20 minutes)

In this talk, I will present a new decomposition of QCD splitting functions, carried out systematically up to second order in the strong coupling. The core idea is to separate the splitting functions into two components: scalar dipole radiator functions and pure remainders. Unlike conventional approaches, our construction does not rely on any soft or collinear approximations. The splitting functions can be used to construct an overlap free subtraction, or for the construction of accurate Parton showers.

Author: KNOBBE, Max (University of Göttingen)

Presenter: KNOBBE, Max (University of Göttingen)

Session Classification: Recent developments in Monte Carlo generators