

Factorization restoration through Glauber gluons

Tuesday, 10 September 2024 18:10 (30 minutes)

We analyze the low-energy dynamics of gap-between-jet cross sections at hadron colliders, for which phase factors in the hard amplitudes spoil collinear cancellations and lead to double logarithmic behavior. Based on a method-of-regions analysis, we identify contributions from perturbative active-active Glauber-gluon exchanges which have precisely the right structure to make the cross section consistent with PDF factorization below the veto scale associated with the gap. The Glauber contributions we identify are unambiguously defined without any regulators beyond dimensional regularization.

Primary author: BECHER, Thomas

Presenter: BECHER, Thomas

Session Classification: Plenary