

All order nonfactorizable jet veto effects in Higgs boson production

Saturday, August 28, 2021 4:10 PM (20 minutes)

I will discuss nonfactorizable QCD corrections from central jet veto to Higgs boson production at the Large Hadron Collider. At hadron colliders, phase factors in the scattering amplitudes lead to double-logarithmic corrections starting at four-loop order. I will introduce our recent work on the first all-order structure of these “super-leading” logarithms. Our analysis shows that in certain kinematic distributions the nonfactorizable corrections can be as large as a percent making them quite comparable to their factorizable counterparts.

Primary author: Prof. SHAO, Dingyu (Fudan University)

Presenter: Prof. SHAO, Dingyu (Fudan University)

Session Classification: Higgs precise measurement