

NLP corrections for H+ jet production.

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Precise experimental data from the Large Hadron Collider and the lack of any persuasive new physics signature demand improvement in the understanding of the Standard Model. The scattering cross-sections are plagued with Leading power (LP) and next-to-leading power (NLP) logarithms. Resummation of LP logarithms has a long history of almost three decades and their resummation methods are well known in the present literature. However, precise prediction also requires the resummation of NLP logarithms, as they have a sizeable numerical impact in the cross-section calculation. These NLP logarithms for colour singlet processes are well known in the literature, however, there is a scarcity of results when final state colour particles are involved in the scattering process. In the talk, I will discuss a new method of calculating the NLP logarithms where final state colour particles are involved and will show its application for Higgs+ jet production.

Alternate track

I read the instructions above

Yes

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