



Contribution ID: 23

Type: Poster

New descriptions of VBS and VBF processes with High Energy Jets

Thursday, December 15, 2022 7:30 PM (2 hours)

High Energy Jets (HEJ) is a resummation framework designed to include contributions from high energy logarithms in $\ln(\sqrt{s}/Q)$ to all orders in perturbation theory. These logs can become significant at the LHC and future colliders, and are significantly enhanced by the requirement of a large dijet invariant mass or large rapidity separation common in VBF/VBS cuts.

I will present a poster giving a general overview of the HEJ formalism at leading logarithm, followed by a discussion on recent developments included as part of the upcoming code release. In particular, I will discuss predictions for the QCD $\alpha_s^2 \alpha_w^2$ contribution to same-sign $\ln^2 \ln$ jets vector boson scattering [arXiv:2107.06818] and for inclusive Higgs + 1 jet production [arXiv:2210.10671].

Type of presentation

Poster

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Session Classification: Poster Session and Dinner