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High Energy resummation for Higgs plus dijets

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Higgs boson production in association with two jets is an interesting process to measure the Higgs to weak-boson coupling (WBF).
However at the LHC the inclusive production of Hjj is dominated by the gluon
fusion component, where the Higgs boson couples to the gluon via a top loop.
The gluon fusion component is typically reduced by cuts requiring a large invariant dijet mass.
Such mass cuts force the phase space in a region of large rapidity separations between the jets, where a logarithm $\ln(s/t)$ becomes relevant.

I will present the latest efforts of resumming even Next-to-Leading logarithmic contributions, as implemented in the generator High Energy Jets (HEJ).
Since the limit of large top-mass and the high energy limit commute, the full top mass dependence can be retained in the predictions.
The effect of the finite top mass is a further 10% reduction of the cross section, on top of the ~40% reduction within the WBF cuts of the results obtained with the HEJ resummation compared to the results at NLO.

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