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## QCD Resummation Effects on $W' \rightarrow tb$

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There are searches for a  $W'$  through many different decay channels at the LHC. Here we study the search for the  $W'$  in the decay channel  $W' \rightarrow tb$ , including the decay of the top, at NLO+NLL in QCD. When applying cuts to the events, it is important to have the most precise predictions for the kinematics of the final state particles. Resummation allows us to include the soft gluon effects on top and bottom quarks, which has large effects on some distributions, such as the transverse momentum of the top and bottom.

### Summary

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