Precision determination of the Wtb coupling in single top production

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We present our calculation of next-to-leading order QCD effects in single top production for a precision determination of the Wtb coupling. The calculation is performed analytically with an off-shell top quark and includes relevant operators from the Standard Model Effective Field Theory (SMEFT) that modify the Wtb coupling also at next-to-leading order in QCD. We discuss the phenomenological importance and put our calculation into the context of current studies.

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