

# Bounds on top operators in the SMEFT from recent LHC measurements (24+6)

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The recent measurements of the Large Hadron Collider and legacy results from previous colliders allow to probe the couplings of the top quark in the context of Effective Field Theories (EFT), such as the Standard Model EFT (SMEFT). We present the results of a global SMEFT fit including those recent experimental results. We show that LHC Run 2 data allow, for the first time, to overconstrain the two-fermion and  $qqt\bar{t}$  four-fermion operator coefficients and yields competitive bounds. We compare the current bounds to projections for the HL-LHC and future lepton colliders, that can yield powerful constraints.

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