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# Directly Probing the Higgs-top Coupling at High Scales

*Tuesday, 13 July 2021 17:00 (15 minutes)*

The top-quark Yukawa coupling $y_t$ is the strongest interaction of the Higgs boson in the Standard Model (SM) with $y_t \sim 1$. Due to its magnitude, it plays a central role in Higgs phenomenology in the SM and would be most sensitive to physics beyond the Standard Model. The top Yukawa can be directly measured at the LHC via top pair production in association with a Higgs boson $t\bar{t}h$. We study new physics effects for the Higgs-top coupling at high scales, using jet substructure techniques. We present the high-luminosity LHC sensitivity to new physics parametrized in the EFT framework and through a general Higgs-top form factor.

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**Primary authors:** MAMMEN ABRAHAM, Roshan (Oklahoma State University); GONÇALVES, Dorival (Oklahoma State University); HAN, Tao (University of Pittsburgh); LEUNG, Sze Ching Iris (University of Pittsburgh); QIN, Han (University of Pittsburgh)

**Presenter:** MAMMEN ABRAHAM, Roshan (Oklahoma State University)

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