

Constraining the SMEFT top sector via searches in tZj and $t\bar{t}Z$ channels with Machine Learning

We explore the projected sensitivity for SMEFT coefficients C_{tZ} and C_{tW} via single top $pp \rightarrow tZj$ and top pair associated production $pp \rightarrow t\bar{t}Z$ channels with machine learning techniques, at the high luminosity LHC. Implications from new physics modifications in relevant background processes are also included. We identify the subset of observables that are most relevant towards constraining C_{tZ} and C_{tW} .

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