



Contribution ID: 8

Type: not specified

Constraining the top quark EFT using the top quark pair production in association with a jet at future lepton colliders

Wednesday 17 March 2021 22:00 (20 minutes)

In this talk, we present the results for constraining the effective field theory describing the top quark couplings through the $e^-e^+ \rightarrow t\bar{t}+\text{jet}$ process.

The analysis is performed at two center-of-mass energies of 500 and 3000 GeV considering a realistic simulation of the detector response and the main sources of background.

The expected upper limits at 95% CL are obtained on the new physics couplings using the dileptonic $t\bar{t}$ final state.

We find that the 95% CL bounds on dimensionless Wilson coefficients considered in this analysis could be probed down to 10^{-4} .

Time Zone

Europe/Africa/Middle East

Primary authors: KHANPOUR, Hamzeh (IPM); MOHAMMADINAJAFABADI, Mojtaba (Institute for Research in Fundamental Sciences (IR)); ESLAMI, Parvin; JAFARI, Reza (IPM)

Presenter: MOHAMMADINAJAFABADI, Mojtaba (Institute for Research in Fundamental Sciences (IR))

Session Classification: PD2: Global Interpretations

Track Classification: Physics and Detectors Tracks: PD2: Global Interpretations