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## 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  $e^-e^+ \rightarrow t\bar{t}$ +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

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