

Contribution ID: 122

Type: ORAL

Precise measurements of top CKM and EWK couplings at FCC-ee

Wednesday 9 October 2024 14:55 (20 minutes)

The electron-positron phase of the Future Circular Collider (FCC-ee) at CERN is proposed as a Higgs, electroweak, flavour, and top factory at the intensity frontier. In particular, about 2 million top quark pairs are expected to be produced at the 365 GeV operation, providing a clean dataset with unprecedented opportunities for top property measurements. This talk covers recent studies on two measurements, along with relevant technical developments and phenomenological discussions: one is a direct determination of the CKM matrix element |Vts| through the top quark to W and s quark decay, and the other is a thorough probe of potential BSM modifications to ttgamma and ttZ couplings via the angular distributions of top decay products.

Primary authors: Dr KIESELER, Jan (KIT); KLUTE, Markus (KIT); PRESILLA, Matteo (KIT); ALSHAMAILY, Sarah (KIT); KEILBACH, Simon (KIT); GIAPPICHINI, Sofia (KIT); ZUO, Xunwu (Karlsruhe Institute of Technology)

Presenter: ZUO, Xunwu (Karlsruhe Institute of Technology)

Session Classification: Parallel - WG1-GLOB

Track Classification: WG1: WG1-GLOB - Physics Potential: Global interpretations