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

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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 $|V_{ts}|$ through the top quark to W and s quark decay, and the other is a thorough probe of potential BSM modifications to $t\gamma$ and tZ couplings via the angular distributions of top decay products.

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