Contribution ID: **239** Type: **Parallel**

Higgs boson couplings to hadrons, invisible, and rare decays at FCC-ee

The FCC-ee collider will deliver unparalleled sensitivity in Higgs boson decays, including couplings to quarks, gluons, and searches for invisible and rare decay modes. By employing advanced jet flavour tagging algorithms and exploiting a clean experimental environment, FCC-ee will measure the Higgs branching fractions to b, c, and gluon jets with sub-percent to few-percent accuracy. It will also provide stringent constraints on couplings to strange quarks and extremely rare or flavour-violating decays, improving current limits by one order of magnitude. Additionally, the FCC-ee will achieve exceptional sensitivity to invisible Higgs decays, with expected limits at the 10^{-4} level, thus probing possible dark matter candidates or new hidden sectors.

Secondary track

Author: KLUTE, Markus (KIT)

Session Classification: T08

Track Classification: T08 - Higgs Physics