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Prospects in Electroweak, Higgs and Top physics at FCC

The FCC integrated programme offers a unique opportunity to comprehensively explore the Higgs, electroweak and top sectors. The FCC-ee clean experimental conditions and well-defined initial state enable the exploitation of all produced Higgs, W, Z bosons and top quarks and allow, in a record time, for a precise characterisation of the Standard Model properties with unrivalled precision. The model-independent determination of Higgs and Top couplings at FCC-ee provides an absolute normalisation for FCC-hh measurements. With the large production rates at FCC-hh, complementary precision measurements of rare Higgs decay modes and an unparalleled characterisation of the Higgs self-interaction become possible. The extended kinematic range provides indirect probes of new physics via precision measurements in the multi-TeV regime. Together, the FCC-ee and the FCC-hh comprehensively explore potential new physics through precision measurements in complementary energy regimes.

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