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Global EFT fits from Higgs and EW at FCC-ee

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The physics program at the FCC-ee offers unparalleled opportunities for precision measurements of the properties of the Z, W and Higgs bosons and the top quark.

Deformations of these properties with respect to the SM predictions would provide indirect evidence of the presence of new physics modifying the electroweak sector. These indirect tests of new physics can be conveniently performed in a systematic and model-independent way using the theoretical framework of Effective Field Theories. In this talk, we illustrate the physics potential of the FCC-ee for indirect tests of physics beyond the SM using a Global EFT fit to the different precision measurements taken from the Z pole to the $t\bar{t}$ threshold in e^+e^- collisions. We also highlight the importance of such measurements for the Higgs physics program of the pp and ep collider options (FCC-hh and FCC-eh).

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