Contribution ID: **184** Type: **Parallel session talk**

Subleading Higgs effects in e+e- -> fermion+antifermion

Thursday 18 July 2024 17:19 (17 minutes)

Subtle field-theoretical effects suggest the presence of additional Higgs contributions in standard model processes. This has been supported by electroweak lattice calculation, e.g. for vector boson scattering. These effects can be included in perturbation theory by a suitable augmentation.

We use such augmented perturbation theory to determine the impact at next-to-leading order at lepton colliders, from LEP to future machines such as FCC, in collisions with fermion-antifermion final states. After providing the formal background, we give first approximate results for differential cross sections and total cross sections. We will discuss what would be necessary to detect these effects.

Alternate track

1. Top Quark and Electroweak Physics

I read the instructions above

Yes

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Session Classification: Higgs Physics

Track Classification: 01. Higgs Physics