

Learning from Higgs Physics at Future Higgs Factories

Thursday, July 5, 2018 12:00 PM (15 minutes)

Future Higgs factories can reach impressive precision on Higgs property measurements. In this talk, we explore its sensitivity to new physics models at the electron-positron colliders. In particular, we study two categories of new physics models, Standard Model with a real scalar singlet extension, and Two Higgs Double Model as examples of weakly-interacting models, Minimal Composite Higgs Model and three typical patterns of the more general operator counting for strong interacting models as examples of strong dynamics. We perform a global fit to various Higgs search channels to obtain the 95 C.L. constraints on the model parameter space. We also compare the sensitivity of various future Higgs factories, namely Circular Electron Positron Collider, Future Circular Collider-ee and International Linear Collider.

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