

## BSM Triple Higgs couplings at ILC/CLIC

*Thursday, 12 October 2023 14:00 (16 minutes)*

Most analyses of triple Higgs couplings (THCs) focused on the SM-like coupling,  $\lambda_{hhh}$ , assuming the SM value,  $\kappa_\lambda := \lambda_{hhh}/\lambda_{hhh}^{\text{SM}} = 1$ .

We will discuss two BSM physics cases:

1)  $\kappa_\lambda \neq 1$ , which is suggested by the requirements for baryogenesis (to explain the matter-antimatter asymmetry of the universe).

2) BSM THCs, such as  $\lambda_{hhH}$ , where  $H$  represents a heavy BSM Higgs boson.

We will show how ILC/CLIC can analyze these two scenarios, far beyond the capabilities of the HL-LHC.

**Primary author:** HEINEMEYER, Sven (IFCA (CSIC, Santander))

**Presenter:** HEINEMEYER, Sven (IFCA (CSIC, Santander))

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