

Highlights of the Higgs physics at ILC

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Precise determination of Higgs parameters is crucial for validation of the Standard Model or any alternative BSM theory addressing open questions either in particle physics or cosmology. Clean environment, high precision of measurements dominated by the statistical uncertainty and a possibility of beam polarization can provide per mille level precision of the Higgs couplings measurements as well as the high sensitivity to BSM physics scale - $O(100 \text{ TeV})$ indirectly accessible already at 250 GeV ILC in EFT formalism. ILC operation at higher center-of-mass energies (500 GeV and above) offers unique prospects of Higgs self-coupling measurement to around 10% and CP violation measurement in vector boson fusion along with numerous BSM probes.

Primary track

Higgs physics at future colliders

Is the speaker a PhD student or post-doc?

No

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