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## Higgs physics with ILC

*Thursday 24 August 2023 08:30 (18 minutes)*

Higgs physics with ILC

speaker TBA

Technologically mature accelerator and detector design and well understood physics program makes ILC a realistic option for realization of a future Higgs factory. Energy staged data collection, employment of beam polarization and capability to reach a TeV center-of-mass energy, enable unique sensitivity to New Physics's deviations from the Standard Model predictions in the Higgs sector and beyond. Coupling precisions of the order of 1% and better are necessary to pin down a concrete New Physics's model. Measurement of the Higgs self-coupling as a shaping parameter of the Higgs potential will benefit from the accessibility of high-energy scales (500 GeV and above). Flexibility to operate from the Z-pole up to a TeV scale enables CP properties of the Higgs boson to be probed in numerous production and decay vertices. These and other ILC measurements will be highlighted in this talk.

### **Collaboration / Activity**

ILC/ILD

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