

Electroweak precision observables for the Higgs coupling determination at the ILC

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Very generically the same BSM physics that modifies Higgs couplings can also modify other electroweak couplings. A concrete example is given about the contact interaction operators in the Standard Model Effective Field Theory. In this respect, the electroweak precision observables (EWPOs) such as A_1 (left right asymmetry in electron Z coupling) and $\Gamma_{\ell\ell}$ (partial width of Z to leptons) turn out to be very useful for the Higgs coupling determination. ILC can improve the EWPOs in at least two ways: by radiative return process or by a dedicated Z-pole running (Giga-Z option). In both ways, the beam polarizations play a very important role. This talk will give current prospects of improving the EWPOs at the ILC.

Primary author: Dr TIAN, Junping (The University of Tokyo)

Presenter: LIST, Jenny (Deutsches Elektronen-Synchrotron (DE))

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