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## Determination of CPV Higgs mixing angle in ZZ-fusion at 1 TeV ILC

*Friday, 1 December 2023 10:00 (15 minutes)*

With the current precision of LHC experiments, it is still possible that the 125 GeV mass eigenstate of the Higgs boson is a CP violating mixture of CP eigenstates of opposite parity. We investigate the possibility to measure CPV mixing angle in such scenario, assuming CP-odd admixture of up to 10%. Polarized ILC data are simulated employing the ILD detector, at 1 TeV center of mass energy. Result is discussed in the light of the theoretical precision target of  $10^{-5}$  for CP violating factor  $f_{CP}$ .

### You are

non-PhD student

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