



Contribution ID: 669

Type: Parallel Talk

Determination of CPV Higgs mixing angle in ZZ-fusion at 1.4 TeV CLIC

Friday, 8 July 2022 16:15 (15 minutes)

In this talk we discuss the results of a full-simulation study exploring CP violation in Higgs production through ZZ fusion. The study is performed for CLIC running at a centre-of-mass energy of 1.4TeV, assuming that the Higgs boson is realized as a mixture of scalar and pseudoscalar states. By measuring the electron and positron in the final state, the CP-violating mixing angle Ψ_{CP} can be probed at the HZZ production vertex, and the statistical precision on its measurement determined. This method is complementary to other studies.

In-person participation

Yes

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Session Classification: Higgs Physics

Track Classification: Higgs Physics