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

Tuesday, 30 August 2022 18:00 (1h 30m)

In this talk we discuss the CP violation in the Higgs sector under assumption that Higgs is a mixture of CP even and odd states. Study is done in ZZ-fusion, at the intermediate energy stage of CLIC, in full simulation of a detector for CLIC and machine and physics related backgrounds. By measuring the properties of electron and positron in the final state, selecting the Higgs dominant decay to $b\bar{b}$ to reduce backgrounds, we discuss the statistical precision of CP-violating mixing angle measurement with 2.5 ab⁻¹ of data.

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