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## Machine learning the Higgs-top CP Measurement

Tuesday 10 May 2022 15:00 (15 minutes)

We explore the direct Higgs-top CP structure via the  $pp \rightarrow t\bar{t}h$  channel with machine learning techniques, considering the clean  $h \rightarrow \gamma\gamma$  final state at the high luminosity LHC (HL-LHC). We show that a combination of a comprehensive set of observables, that includes the  $t\bar{t}$  spin-correlations, with mass minimization strategies to reconstruct the  $t\bar{t}$  rest frame provides large CP-sensitivity.

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