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Unfolding Higgs-top CP measurement

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We explore CP-violation in Higgs-top interactions via the semileptonic $pp \rightarrow t\bar{t}h$ channel with $h \rightarrow \gamma\gamma$ at the high luminosity LHC with machine learning-based unfolding techniques. We invert the event simulation chain, unfolding the detector-level events to construct and encode observables in their relevant partonic reference frame to improve CP sensitivity.

Authors: GONÇALVES, Dorival (Oklahoma State University); ACKERSCHOTT, Jona (Heidelberg University); BARMAN, Rahool Kumar (Oklahoma State University); HEIMEL, Theo (Heidelberg University); PLEHN, Tilman

Presenter: BARMAN, Rahool Kumar (Oklahoma State University)

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