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Prospects for Higgs boson discovery and measurement in the H → tau tau decay mode

We present the potential for measurement of a low-mass Higgs boson at the LHC using WH and ttH production, with the Higgs boson decaying to tau pairs. We find that these modes can enhance discovery and coupling-ratio sensitivity with 30/fb and 300/fb of 14 TeV collision data, respectively, for a Higgs boson with mass between 115 and 135 GeV.

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