

Contribution ID: 343 Type: Poster

Prospects for Higgs boson discovery and measurement in the $H \rightarrow tau\ tau\ decay\ mode$

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.

Primary authors: BODDY, Christopher (University of Oxford-Unknown-Unknown); Dr HAYS, Christopher Paul (University of Oxford); Dr FARRINGTON, Sinead (University of Oxford)

Presenter: BODDY, Christopher (University of Oxford-Unknown-Unknown)

Track Classification: 02 - The Standard Model and Electroweak Symmetry Breaking