

Abstract Submitted
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Search for a neutral pseudo-scalar Higgs boson decaying to a Z boson and an SM-like Higgs boson using tau final states TYLER RUGGLES, University of Wisconsin-Madison, CECILE CAILLOL, BARBARA CLERBAUX, University of Brussels, STEPHANE COOPERSTEIN, Princeton University, SRIDHARA DASU, University of Wisconsin-Madison, ABDOLLAH MOHAMMADI, University of Brussels, ISOBEL OJALVO, TAPAS SARANGI, University of Wisconsin-Madison — Results of a search for a neutral pseudo-scalar Higgs boson (A) decaying to a Z boson and an standard-model-like Higgs boson (h) in the pp collision data recorded by CMS in 2012 are presented. The analysis targets final states where the standard-model-like Higgs boson decays to a pair of tau leptons, and the Z boson to a pair of light leptons. The search is performed in the context of the minimal supersymmetric extension of the standard model. The dataset corresponds to an integrated luminosity of 19.7 fb^{-1} recorded at 8 TeV center-of-mass energy. No excess of events is found and upper limits at 95% confidence level are set on the A production cross section in the mass range $220 < m_A < 350 \text{ GeV}$.

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