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## Search for $A$ to $Zh(bb)$ in ATLAS at 13 TeV

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A search for a heavy, CP-odd Higgs boson,  $A$ , decaying into a Z boson and a CP-even Higgs boson,  $h$ , with a mass of 125 GeV is performed using the ATLAS detector at the Large Hadron Collider. The search uses proton-proton collision data at a centre-of-mass energy of 13 TeV corresponding to an integrated luminosity of 3.2 /fb. Decays of  $h$  bosons to  $bb$  pairs, where the resulting hadronic jets can be resolved or are merged in the detector, are both considered. Final states of the Z boson decaying to a pair of charged leptons,  $Z \rightarrow e^+e^-$  and  $Z \rightarrow \mu^+\mu^-$ , or into neutrinos,  $Z \rightarrow \nu\nu$ , are considered. The data are used to determine 95% confidence level upper limits on the product of production cross-sections and branching fractions,  $\sigma(pp \rightarrow A) \cdot \text{BR}(A \rightarrow Zh) \cdot \text{BR}(h \rightarrow bb)$  for  $m_A = [200, 2000]$  GeV assuming gluon-fusion or b-quark-associated exclusive production. Results are also interpreted in the context of benchmark models for a two-Higgs doublet extension of the Standard Model.

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