

Search for the SM Higgs Boson Produced in Association with a Vector Boson and Decaying to Bottom Quarks

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A search for the Higgs boson produced in association with a W or Z boson and decaying to bottom quarks is presented. A sample of approximately 24/fb of data recorded by the CMS experiment at the Large Hadron Collider, operating at center-of-mass energies of 7 TeV and 8 TeV in 2011 and 2012, respectively, is used to search for events consistent with the signature of two b-jets recoiling with high momentum from a W($l\nu$), Z(ll), or Z($\nu\nu$) decay, where l = electron or muon (or hadronically-decaying tau particle in the case of W bosons). Observed signal significance and 95% confidence level upper limits on the production cross-section relative to the Standard Model prediction are presented for the 110-150 GeV Higgs mass range.

APS member ID

61122373

Primary author: Mr MOONEY, Michael (Princeton University)

Presenter: Mr MOONEY, Michael (Princeton University)

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