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## Search for the standard model Higgs boson produced in vector boson fusion and decaying to bottom quarks with CMS

A search for the standard model Higgs boson is presented in the Vector Boson Fusion production channel with decay to bottom quarks. A data sample comprising  $35.9 \text{ fb}^{-1}$  of proton-proton collision at  $\sqrt{s} = 13 \text{ TeV}$  collected during the 2016 running period has been analyzed. Production upper limits at 95% Confidence Level are derived for a Higgs boson mass of 125 GeV, as well as the fitted signal strength relative to the expectation for the standard model Higgs boson. Results are also combined with the ones obtained with 2015  $\sqrt{s} = 13 \text{ TeV}$  data, and Run1  $\sqrt{s} = 8 \text{ TeV}$  data collected in 2012.

### Experimental Collaboration

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