



Contribution ID: 272

Type: **Parallel Talk**

## Inclusive search for boosted Higgs bosons using $H \rightarrow bb$ decays with the CMS experiment

*Thursday, July 6, 2017 10:00 AM (15 minutes)*

We present an inclusive search for a Higgs boson with high transverse momentum decaying to a bottom-antibottom quark pair in pp collisions using the 2016 data sample corresponding to  $35.9\text{fb}^{-1}$  collected by the CMS experiment at LHC. High  $p_T$  Higgs bosons candidates are reconstructed in a single jet with opening angle corresponding to  $R = 0.8$  (AK8 jet). Jet substructure and dedicated b-tagging techniques are then used to identify boosted Higgs boson to  $bb$ .

### Experimental Collaboration

CMS

**Primary author:** CMS COLLABORATION

**Presenter:** VERNIERI, Caterina (Fermi National Accelerator Lab. (US))

**Session Classification:** Higgs and new physics

**Track Classification:** Higgs and New Physics