

## Recent CMS results on B hadrons and quarkonia: production and properties.

### Abstract

The CMS experiment has a wide program on heavy flavor physics, covering production and decay properties of B hadrons and quarkonia, as well as searches and study of exotic hadrons, and rare decays. In this talk, we present precise measurements of B hadron lifetimes, that are good as or better than previous measurements. Recent measurements of the  $\Lambda_b$  polarization and angular parameters in  $\Lambda_b \rightarrow J/\psi \Lambda$  decays are also presented and compared to various theoretical predictions. On the other hand, measurements at 13 TeV of  $\psi(nS)$  ( $n=1,2$ ) and  $Upsilon(nS)$  ( $n=1,2,3$ ) production cross sections are shown and compared with theoretical expectations as a function of transverse momentum and rapidity. Finally, we discuss the latests results from CMS on the search for exotic resonances (the controversial  $X(5568)$ ) in the  $B_s \pi^+$  mass spectrum.

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