

Recent Flavor Physics Results at CMS

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We report recent flavor physics results, using pp collision data collected by the CMS experiment at the LHC, including the observation of two excited B_c states, the study of the $B \rightarrow J/\psi \Lambda b$ decay, and a search for charged lepton flavor violating decays $\tau \rightarrow 3\mu$. The first analysis is based on an event sample corresponding to a luminosity of 143 fb^{-1} at $\sqrt{s}=13 \text{ TeV}$. The B_c excited states are observed in the $B_c \pi\pi$ invariant mass spectrum, with the ground state reconstructed through its decay to $J/\psi \pi$. The second analysis uses a data set of 19.6 fb^{-1} collected at $\sqrt{s}=8 \text{ TeV}$. The BR of this decay is measured with respect to $\text{BR}(B^+ \rightarrow J/\psi K^*)$ and the invariant mass distributions of $J/\psi \Lambda b$, $J/\psi p$ and Λb systems are investigated. The third analysis uses the data collected by CMS in 2016, corresponding to a luminosity of 33 fb^{-1} .

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