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## Heavy Flavor Spectroscopy at CMS

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We report new results in heavy flavor spectroscopy, using pp collision data collected by the CMS experiment at the LHC, including the observation of two excited  $B_c$  states and the study of the  $B \rightarrow J/\psi \Lambda p$  decay. The first analysis is based on an event sample corresponding to a luminosity of  $143 \text{ fb}^{-1}$  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  $19.6 \text{ fb}^{-1}$  collected at  $\sqrt{s}=8 \text{ TeV}$ . The Branching Ratio of this decay is measured with respect to  $\text{BR}(B^+ \rightarrow J/\psi K^*)$  and the invariant mass distributions of the  $J/\psi \Lambda$ ,  $J/\psi p$  and  $\Lambda p$  systems are investigated

### Collaboration name

CMS

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