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## Production and decay of $\eta_c$ states at LHCb

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The LHCb experiment is designed to study the decays and properties of heavy flavoured hadrons produced in the forward region from pp collisions at the CERN Large Hadron Collider. It has recorded the world's largest data sample of beauty and charm hadrons, enabling precise studies into the production and decay of such particles.  $\eta_c$  production has been studied in B decays and in prompt production. For the first time its production cross-section has been measured in pp collisions. For the  $\eta_c(2S)$  the decay into  $p\bar{p}$  is observed for the first time. We report latest results of those measurements.

### Summary

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