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Measurement of electrons from beauty-hadron decays in pp collisions at $\sqrt{s} = 13$ TeV with ALICE

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The measurement of heavy-flavour (charm and beauty) production in proton-proton (pp) collisions at the LHC provides a crucial information about quantum chromodynamics (QCD) in high-energy regime. Due to their large masses, heavy quarks are mainly produced in initial hard scattering processes. Therefore, heavy-flavour production cross section represents a primary benchmark for perturbative QCD (pQCD) calculations. Furthermore, heavy-flavour measurements in pp collisions provide a reference for measuring nuclear modification in nucleus-nucleus collisions.

In this contribution, the p_T -differential production cross section of electrons from beauty-hadron decay electrons in pp collisions at $\sqrt{s} = 13$ TeV with ALICE detector at midrapidity will be reported. Electrons from beauty-hadron decays were extracted based on the distance of closest approach (DCA) to the collision vertex. Comparison of the result with the FONLL (Fixed-Order with Next-to-Leading Log) pQCD calculation will also be shown.

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