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Measurement of the production of heavy- flavour decay electrons in pp collisions at $\sqrt{s}=2.76$ TeV with ALICE

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Heavy quarks, being produced in the initial stages of heavy-ion collisions, provide an excellent probe for the properties of the quark-gluon plasma (QGP). The expected in-medium energy loss of quarks is predicted to have a mass-dependence; however, recent results indicate that heavy-quarks lose more energy than expected. The measurement of electrons from heavy flavor decays provides insight into the energy loss of heavy quarks. In this poster, we present the measurement of the heavy-flavor electron cross-section at central rapidity in $\sqrt{s} = 2.76$ TeV pp collisions in the transverse momentum range 2-12 GeV/c. The measurement in pp collisions provides the necessary baseline for comparison to heavy ion collisions and provides a test of perturbative QCD calculations of heavy quark production. The result is compared to FONLL perturbative QCD predictions.

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