Quark Matter 2018



Contribution ID: 511

Type: Poster

Beauty production via non-prompt D^0 from CMS in pp and PbPb collisions at 5.02 TeV

Tuesday 15 May 2018 19:10 (30 minutes)

Heavy quarks are unique probes to study the medium created in heavy-ion collisions. Detailed measurements of the production of bottom hadrons can supply information crucial to understanding the properties of the strongly interacting QCD matter and the flavor dependence of parton energy loss. In this poster, the measurement of transverse momentum spectra of D^0 from beauty-hadron decays in pp and PbPb Collisions at 5.02 TeV performed by the CMS collaboration is presented. The D^0 from B decay are distinguished from prompt D^0 by their different geometrical distributions relative to the collision point, due to the large decay length of B meson. The measured spectrum in pp collisions is compared to perturbative QCD calculations. The Nuclear Modification Factor (R_{AA}) of D^0 from B decay will also be reported, comparing with prompt D^0 , light flavor hadrons, as well as model predictions.

Content type

Experiment

Collaboration

CMS

Centralised submission by Collaboration

Presenter name already specified

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Session Classification: Poster Session

Track Classification: Open heavy flavour