

Measurements of strange and non strange charm production in PbPb collisions at 5.02 TeV with the CMS detector

Thursday 4 October 2018 09:20 (20 minutes)

The heavy-flavor particles are produced in the earlier stage in heavy-ion collision and experience the full evolution of the QGP medium. The measurement of D mesons could provide us important inputs for flavor and charge dependent transport properties. On the other hand, with abundant strange quarks presented in heavy-ion collision, the D_S^+ production is expected to be enhanced hadronization via recombination. Large statistics proton-proton and PbPb samples collected at 5.02 TeV with CMS detector are used for the measurement of D^0 and D_S^+ production over a wide transverse momentum range. Result of D-meson p_T -differential cross section, nuclear modification factor R_{AA} , and the ratio of D_S^+ over D^0 for both pp and PbPb collisions are presented.

Summary

Presenter: PENG, Cheng-Chieh (Purdue University (US))

Session Classification: Parallel 3