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Measurement of the suppression and elliptic anisotropy of heavy-flavor muons in lead-lead collisions at $\sqrt{s_{\mathrm{NN}}}$=2.76TeV with the ATLAS detector

Wednesday, 25 May 2016 15:20 (20 minutes)

(speaker known later)
Measurements of the nuclear modification factor (R_{AA}) and the elliptic flow (v_2) of muons from heavy-quark decays in Pb+Pb collisions at $\sqrt{s_{\mathrm{NN}}}$=2.76 TeV from the ATLAS experiment are presented. The measurements are done over the p_{T} range of 4-14˜GeV and over the centrality range of (0-60)%. A significance elliptic flow is observed over the full p_{T} range for all centralities. The R_{AA} results are consistent with previous measurements but have much more statistical precision. More than a factor of two suppression of the muon yield is observed in most central collisions. These measurements give us an insight into the interaction of heavy quarks with the bulk medium produced in heavy-ion collisions.

Collaboration

ATLAS

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