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RAA and v2 of muons from heavy-quark decays in lead-lead collisions at sqrt(sNN)=2.76TeV with the ATLAS detector

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The ATLAS measurement of the nuclear modification factor (RAA) and the elliptic flow (v2) of muons from heavy quark decays in Pb+Pb collisions at sqrt(s_NN)= 2.76 TeV are presented. The measurements are done over the pT range of 4-14 GeV and over the centrality range of (0-60)% within pseudorapidity interval of $|\eta|<1$. A significant elliptic flow is observed over the full pT range for all centralities. The RAA results are consistent with previous measurements but have much better statistical precision. More than a factor of two suppression of the muon yield relative to scaled pp data is observed in the most central collisions. These measurements give an insight into the interaction of heavy quarks with the bulk medium produced in heavy-ion collisions.

On behalf of collaboration:

ATLAS

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