## **Quark Matter 2012**



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## Elliptic flow of high transverse momentum electrons from heavy-flavour decays in Pb-Pb collisions at sqrt(s\_NN)=2.76 TeV measured by ALICE

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Heavy quarks, charm and bottom, are produced in early stages of heavy-ion collisions. Propagating through the created matter they serve as a probe of the dynamics of the strongly-interacting, hot and dense plasma of quarks and gluons (QGP).

The transverse momentum dependence of the elliptic flow (v2) of heavy quarks is sensitive to the properties of the QGP.

A non-zero v2 of low transverse momentum electrons from semi-leptonic decays of heavy flavours indicates a collective motion of the heavy quarks with respect to the bulk of the created matter. Whereas, the high transverse momentum v2 is sensitive to the path length dependence of heavy-quark energy loss within the QGP.

We present measurements of heavy-flavour electron v2 in Pb-Pb collisions at  $sqrt(s\_NN) = 2.76$  TeV by the ALICE experiment at mid-rapidity. In 2011, the Electromagnetic Calorimeter (EMCal) provided a dedicated online trigger for measurements of high momentum electrons in Pb-Pb collisions. The electrons were identified in these triggered events using the Time Projection Chamber (TPC) and the Electromagnetic Calorimeter (EMCal). The heavy-flavour electron v2 will be shown as a function of the transverse momentum of the decay electrons.

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