

Open-charm meson elliptic flow measurement in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV with ALICE at the LHC.

Monday, 28 May 2012 17:30 (20 minutes)

A Large Ion Collider Experiment (ALICE) is one of the four major experiments at the Large Hadron Collider (LHC), and it is dedicated to the study of ultra-relativistic heavy ion collisions, with the goal of investigating the properties of the high-density state of QCD matter produced in these collisions.

The study of D meson production azimuthal anisotropy and the measurement of their elliptic flow (v_2) can provide insight on the degree of thermalization of charm quarks in the medium and on the hadronization mechanism.

We present the measurement of the D^+ , D^0 and D^{*+} meson v_2 in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV at the LHC with ALICE. We discuss the details of the analysis and we show the results obtained from data samples collected in 2010 and 2011.

Primary author: ORTONA, Giacomo (INFN Torino)

Presenter: ORTONA, Giacomo (INFN Torino)

Session Classification: Parallel IIA: Heavy flavour