



# XXIV QUARK MATTER DARMSTADT 2014

Contribution ID: 274

Type: **Poster**

## **Measurement of electrons from beauty-hadron decays in p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with ALICE at the LHC**

*Tuesday 20 May 2014 16:30 (2 hours)*

Heavy-flavour hadrons, containing charm or beauty quarks, are expected to be probes providing constraints on partonic energy-loss mechanisms in the medium produced in heavy-ion collisions since they are produced at an early stage in the initial hard scattering processes. In particular, the medium-induced parton energy loss is expected to depend on the parton mass and colour charge. This results in a reduction of beauty-quark energy loss compared to charm-quark energy loss. Therefore the separate study of charm and beauty production allows us to test theoretical predictions. Measurements of medium modifications of heavy-flavour transverse momentum distributions in p-Pb collisions allow us to quantify cold nuclear matter effects in the initial state and to deduce the role of final-state effects in Pb-Pb collisions. With the ALICE central barrel detectors, electrons can be identified with high purity down to low transverse momentum. The production of electrons from beauty-hadron decays can be measured using their displacement from the primary vertex thanks to the long lifetime of the beauty hadrons. The status of the analysis of the electrons from beauty decays in p-Pb collisions will be presented.

### **On behalf of collaboration:**

ALICE

**Author:** KWEON, Min Jung (Inha University (KR))

**Presenter:** KWEON, Min Jung (Inha University (KR))

**Session Classification:** Poster session

**Track Classification:** Open Heavy Flavour and Quarkonia