Contribution ID: **548** Type: **Parallel**

Charged particle production at large transverse momentum in PbPb collisions at sqrt(s)=2.76 TeV measured with ALICE at the LHC.

Thursday 26 May 2011 15:00 (20 minutes)

The observed suppression of high-pT particle production in heavy-ion collisions is generally attributed to energy loss of partons as they propagate through the hot and dense QCD medium. Inclusive transverse momentum spectra of primary charged particles in Pb-Pb collisions at sqrt(s)=2.76 TeV have been measured by the ALICE Collaboration at the LHC. The data are presented in intervals of collision centrality. The charged particle spectra are compared to those measured in pp collisions at the same collision energy, scaled by the number of underlying nucleon-nucleon collisions. This comparison is expressed in terms of the nuclear modification factor R_AA. The results indicate only weak medium effects in peripheral collisions, while there is clear evidence for strong medium effects in central collisions. In this talk we will present the results of an analysis of the full Pb-Pb statistics obtained in the Nov. 2010 run. With these data the transverse momentum range covered is increased to 50 GeV/c as compared to previous studies of R_AA by ALICE. The evolution of R_AA with collision centrality and transverse momentum will be discussed.

Author: OTWINOWSKI, Jacek (Research Division and ExtreMe Matter Institute EMMI, GSI Helmholtzzentrum für Schwerionenforschung, Darmstadt, Germany)

Presenter: OTWINOWSKI, Jacek (Research Division and ExtreMe Matter Institute EMMI, GSI Helmholtzzentrum für Schwerionenforschung, Darmstadt, Germany)

Session Classification: Jets

Track Classification: Jets