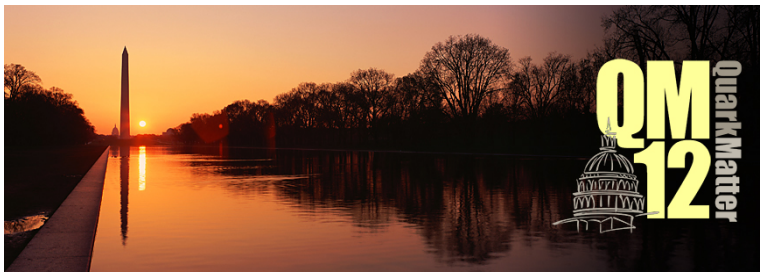

Contribution ID: **401** Type: **Oral Presentation**

Production of Charged Pions, Kaons, and Protons in 2.76 TeV Pb-Pb Collisions at high p_t measured with the ALICE Experiment.

Thursday, August 16, 2012 2:20 PM (20 minutes)

The main tracking detector in the central barrel ($|\eta| < 1$) of the ALICE experiment is the Time Projection Chamber. In addition to charged particle tracking it provides particle identification (PID) through the measurement of the specific energy loss, dE/dx. At low momentum ($p < 1$ GeV/c), pions, kaons, and protons can be cleanly separated. Thanks to the relativistic rise of the dE/dx, the relative yield of pions, kaons, and protons can also be extracted statistically at higher momenta, $p > 3$ GeV/c.

In this talk, spectra for charged pions, kaons, and protons from pp collisions at $\sqrt{s} = 2.76$ TeV and Pb-Pb collisions at $\sqrt{s_{NN}}$ = 2.76 TeV for $3 < p_t < 20$ GeV/c will be presented, and the nuclear modification factor R_{AA} will be derived. The evolution of R_{AA} with collision centrality and transverse momentum will be discussed, and compared to unidentified charged particles, K^0_s , Λ, and theoretical predictions.

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