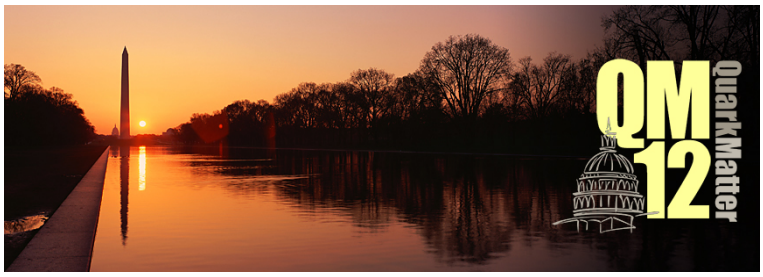

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Pseudorapidity density of charged particles in a wide pseudorapidity range and its centrality dependence in Pb-Pb collisions at 2.76 TeV

Tuesday 14 August 2012 17:25 (20 minutes)

In this talk we present a measurement of the pseudorapidity distribution in the range −5 < eta < 5.25, for different centralities in Pb-Pb collisions at sqrt(s_NN) =2.76 TeV. This also allows us to estimate the total number of produced charged particles. The measurement is performed exploiting LHC satellite bunches, that is bunches captured in non-nominal RF buckets. These give rise to displaced vertices in the range −187.5 < zvtx < 375 cm, allowing the ALICE forward detectors (VZERO and FMD) to cover a wide pseudorapidity window. The dependence of dNch/deta on the number of participant nucleons or on the number of binary collisions is sensitive to mechanisms underlying particle production (eg. the effect of gluon saturation). In this contribution ALICE data will be compared to current models and an analysis of the longitudinal scaling will be performed.

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