

# Pseudorapidity density of charged particles and its centrality dependence in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV

Hans Hjersing Dalsgaard<sup>\footnote{\texttt{hans.dalsgaard@cern.ch}}</sup>  
(for the ALICE collaboration)

We present the first measurements of the pseudorapidity ( $\eta$ ) distribution in a wide range for different centralities in Pb-Pb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV. Using the SPD and FMD detectors of ALICE we can cover a wide region in  $\eta$ :  $-3.4 < \eta < 5$ . The distributions yield the total number of produced charged particles in Pb+Pb collisions at the LHC energy. The dependence of  $dN_{ch}/d\eta$  on the number of participant nucleons or on the number of binary collisions is sensitive to models describing the mechanism underlying particle production (eg. gluon saturation models). In this contribution ALICE data will be compared to current models and an analysis of longitudinal scaling will be performed.

**Primary author:** DALSGAARD, Hans Hjersing (Niels Bohr Institute, University of Copenhagen)

**Presenter:** DALSGAARD, Hans Hjersing (Niels Bohr Institute, University of Copenhagen)

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