LHC Seminar

SPEAKER: Dr. Andreas Morsch (CERN)

TITLE: **Particle Production and binary scaling in p-Pb collisions at the LHC**

DATE: Tue 12/11/2013 11:00

PLACE: Council Chamber

ABSTRACT

The analysis of p-Pb collisions allows us to study cold nuclear effects in order to establish a baseline for the interpretation of heavy ion results. ALICE has measured nuclear modification factors in minimum bias p-Pb collisions with respect to the pp reference for a large variety of probes ranging from inclusive hadrons to heavy flavor and jets.
The next step would be to measure the centrality dependence of these observables. To this end, the binary scaling factors (Ncoll) between pp and p-Pb have to be determined for each centrality class.
Centrality measurements rely on integrated multiplicty or energy measurments in the forward direction. However, these centrality observables are themselves sensitive to particle production from multiple semi-hard scatterings leading, in general, to a violation of simple binary scaling.
We will discuss centrality measurements in ALICE and the biases on binary scaling on the example of inclusive charged hadron production and model calculations.

Organised by: M. Mangano, C. Lourenco, G. Unal.....
Tea and Coffee will be served at 10h30