



LHC Seminar

SPEAKER: Michele Floris (CERN)

TITLE: **Light-flavour hadron production in Pb-Pb collisions at the LHC measured by the ALICE experiment**

DATE: Tue 19/03/2013 11:00

PLACE: TH Conference Room

ABSTRACT

The ultimate goal of Heavy-Ion collisions is the study of the properties of the deconfined and chirally restored medium known as the Quark-Gluon Plasma.

With the advent of the Large Hadron Collider (LHC) a new energy regime was reached. Light-flavour hadrons allow investigation of the bulk properties of the created medium.

The shape of the transverse momentum distributions of identified hadrons at low transverse momentum and their evolution with the collision centrality allow constraints to be placed on the collective expansion properties of the fireball.

The study of identified particle spectra at intermediate transverse momenta provides a handle on the hadronization mechanism, allowing for testing of the recombination models.

At higher transverse momenta, the study of identified particles provides insight into the mechanism of parton energy loss in the hot and dense medium.

The particle densities at mid-rapidity allow for the study of the hadrochemistry of the event, providing a window on the chemical properties of the medium at the phase transition to hadrons.

In this talk we will present the latest ALICE results on identified and inclusive light-flavour charged particles and we will discuss their implications for the interpretation of the heavy ion results at the LHC.

Organised by: M. Mangano, C. Lourenco, G. Unal.....

****Tea and Coffee will be served at 10h30****