



# LHC Seminar

**SPEAKER:** BUSCH, O. (Tsukuba University and University of Heidelberg)

**TITLE:** **Jet properties in Pb-Pb collisions at ALICE**

**DATE:** Tue 10/05/2016 11:00

**PLACE:** 4-3-006 - TH Conference Room

## ABSTRACT

The research programme of the ALICE experiment at the LHC focuses on studies of the Quark-Gluon Plasma, a state of matter where quarks and gluons are deconfined. The measurement of jets originating from the fragmentation of hard-scattered partons in the early phases of a nuclear collision allows one to study parton energy loss in the hot and dense medium. Measurements of the jet structure and particle composition explore possible modifications of the parton fragmentation and hadronisation due to the interaction with the medium. In this talk, we present measurements of the production of Lambda baryons and  $K^0_S$  mesons in association with charged jets in Pb-Pb collisions at 2.76 TeV. Furthermore, measurements of a set of jet shapes characterising the longitudinal and transverse jet structure, including girth,  $ptD$  and the difference between the leading and subleading tracks of the jet, will be discussed. The results are compared with a variety of jet quenching Monte Carlo models.

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