



Contribution ID: 118

Type: **not specified**

Jet production and structure in pp, p-Pb and Pb-Pb collisions measured by ALICE

Friday, 13 September 2013 17:20 (20 minutes)

One of the major goals of jet and high transverse momentum measurements in heavy-ion collisions is to quantify the medium-modified fragmentation of hard scattered partons. Here, the motivation for the reconstruction of jets, as compared to single particle measurements, is to gain a larger sensitivity to the possibly modified structure of the parton shower. It aims at the understanding of the fundamental mechanisms of in-medium energy loss and their relation to transport properties of the medium itself.

The measurement of the jet production cross section in three different colliding systems pp (QCD vacuum), p-Pb (cold nuclear matter), and PbPb (hot partonic system) allows to extract the modification of jets in the hot and dense medium with respect to two references.

We will present recent ALICE results on the jet production in pp, p-Pb and Pb-Pb collisions and discuss their sensitivity to a modified jet fragmentation process beyond leading parton energy loss and explore the impact of cold nuclear matter.

Primary author: ALICE, Collaboration (CERN, Geneva)

Presenter: KRAL, Jiri (University of Jyväskylä (FI))

Session Classification: Parallel talks - Session 4B