

Measurement of jet radial profile through jet-hadron correlation in Pb-Pb collisions at 5.02 TeV

The heavy-ion physics program of the ALICE experiment at the LHC aims to reveal the properties of strongly interacting QCD matter, the so-called Quark-Gluon Plasma (QGP), which is formed under extreme energy density conditions.

Jets are well calibrated and established probes of the QGP properties. At the formation of QGP, initial energies of the hard scattered partons, which are the origin of jets, can be suppressed and re-distributed while traversing the QGP and then measured jet profiles are modified in comparison with the case of vacuum. This phenomenon is known as 'jet quenching'.

A jet-hadron correlation study is performed to characterize the jet quenching effect. We will present the measurements of charged jet radial profiles through jet-hadron correlations in Pb-Pb collisions at the centre-of-mass energy of 5.02 TeV, and compare to charged particle jet result in pp at the same beam energy, based on data samples collected with ALICE at the LHC in 2015.

Summary

Primary author: HOSOKAWA, Ritsuya (University of Tsukuba (JP))

Presenter: HOSOKAWA, Ritsuya (University of Tsukuba (JP))

Session Classification: Poster Session