

Abstract Submitted
for the APR14 Meeting of
The American Physical Society

Jet studies in Pb-Pb collisions with ALICE at LHC JOEL MAZER,
Univ of Tennessee, Knoxville, ALICE COLLABORATION — High energy heavy ion collisions allow the study of nuclear matter at high temperatures and energy densities, where a Quark Gluon Plasma (QGP) is formed. One way of probing the QGP is by measuring the resulting energy loss from the suppression of jets. A jet is the collimated shower of hadrons produced by a parton resulting from a hard scattering early in the collision. In heavy ion collisions, partons undergo interactions with the QGP, which reduces the jet energy. In non-central collisions, the asymmetry of the hot and dense matter profile is expected to lead to a dependence of the jet yield on the angle with respect to the reaction plane. The current methods used in ALICE for studies of full jets will be discussed. Full jets are reconstructed from clusters using the Electromagnetic Calorimeter (EMCal) detector and charged tracks from the ALICE tracking system. The current status of studies of jets in Pb-Pb collisions relative to the reaction plane will be presented.

Joel Mazer
Univ of Tennessee, Knoxville

Date submitted: 10 Jan 2014

Electronic form version 1.4