Identification of bottom quark jets in Pb+Pb collisions in ALICE at the LHC

BRANDON BOSWELL, California Polytechnic State University — Partonic energy loss of high transverse momentum (pT) quarks and gluons in the Quark-Gluon Plasma has been inferred from the suppression of high pT hadrons observed in heavy ion collisions at RHIC. In order to learn more about the details of this energy loss, one would like to separately measure the effects on quarks and gluons. One way to do this is by identifying heavy quark jets through the semileptonic decay to electrons of bottom hadrons produced in the jet. This talk will show how results from the ALICE tracking system and electromagnetic calorimeter (EMCAL) can be used to identify heavy quark jets by identifying candidates containing electrons that satisfy a displaced vertex cut or those with large transverse impact parameter significance.