Charged Particle Production at Large Transverse Momentum in Pb-Pb Collisions at sqrt (s)=2.76\$ TeV Measured with ALICE at the LHC

Dr. Jacek Otwinowski GSI Darmstadt

The observed suppression of high-pT particle production in heavy-ion collisions is generally attributed to energy loss of partons as they propagate through the hot and dense QCD medium. Inclusive transverse momentum spectra of primary charged particles in Pb-Pb collisions at sqrts(s)=2.76 TeV have been measured by the ALICE Collaboration at the LHC. The data are presented in intervals of collision centrality. The charged particle spectra are compared to those measured in pp collisions at the same collision energy, scaled by the number of underlying nucleon-nucleon collisions. This comparison is expressed in terms of the nuclear modification factor R_AA. The analysis details and the evolution of R_AA with collision centrality and transverse momentum will be presented.