

Transverse momentum spectra and nuclear modification of charged particles at $\sqrt{s_{NN}}=5.02$ TeV measured by ALICE at the LHC

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Transverse momentum spectra of charged particles are an important tool to investigate the properties of the Quark Gluon Plasma created in heavy ion collisions. While the measurement in pp collisions provides a baseline test of perturbative QCD, in Pb-Pb collisions any deviation from a scaling with the number of elementary nucleon-nucleon collisions, quantified by the nuclear modification factor, provides insights on the parton energy loss in the hot and dense medium. We present measurements of transverse momentum spectra in pp and Pb-Pb collisions collected by the ALICE experiment at the top-LHC energy in Run 2 and compare the results to the previous measurements at lower energy as well as to the expectations from Monte Carlo event generators and model calculations which include jet quenching in the medium.

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