

## Transverse Momentum Spectra of Unidentified Charged Particles in pp Collisions at the ALICE experiment

The ALICE experiment at the CERN-LHC has accumulated data on pp and Pb–Pb collisions in the past two years. Designed for exploring the properties of hot and dense matter formed in heavy-ion collisions, the ALICE Time Projection Chamber (TPC) has the capability to measure the transverse momentum ( $p_T$ ) of charged particles in a broad  $p_T$  range for  $p_T > 150$  MeV/c. \

The transverse momentum spectra of unidentified charged particles for pp collisions at  $\sqrt{s} = 0.9, 2.76$  and 7 TeV are presented. The extraction of a pp baseline for the calculation of the nuclear modification factor  $R_{AA}$  at  $\sqrt{s_{NN}} = 2.76$  TeV is discussed and compared to alternative approaches to construct a baseline. In addition, the dependence of the average transverse momentum of these spectra on center-of-mass energy is reviewed and compared to measurements by other experiments.

**Primary author:** Dr PHILIPP, Luettig (Institut fuer Kernphysik Goethe-Universitaet)