

## Charged pion spectra at high $p_T$ measured via $dE/dx$ with the ALICE TPC

The TPC is the main tracking detector in the central barrel ( $|\eta| \leq 1$ ) of the ALICE experiment. In addition to tracking it provides particle identification through the measurement of the specific energy loss,  $dE/dx$ , which depends only on  $\beta\gamma = p/m$ . At low momentum,  $p < 1\text{GeV}/c$ , pions, kaons, and protons, can be cleanly separated in different momentum intervals. At high momentum,  $p > 3\text{GeV}/c$ , the yield of pions, kaons, and protons can be extracted statistically on the relativistic rise.

In this poster I will show results from pp @ 2.76 TeV and Pb-Pb @ 2.76 TeV/nucleon for  $3.0 < p_T < 20.0$  for charged pions. By combining the results from this analysis with results from the analysis of unidentified charged particles, the charged pion spectra and the charged pion  $R_{AA}$  is determined.

**Primary author:** Dr CHRISTIANSEN, Peter (Lund University)

**Presenter:** Dr CHRISTIANSEN, Peter (Lund University)

**Track Classification:** Jets