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## Identification of charged kaons using kink topology in pp and Pb-Pb collisions with ALICE at the LHC

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Identification of charged kaons can be carried out using kink topology based on the two-body decay mode ( $K \rightarrow \mu + \nu_\mu$ ) inside the volume of TPC detector. For the first time for Pb-Pb collisions, the transverse momentum spectra of charged kaons are measured from their decay daughters using kink topology with the new Run 2 data at  $\sqrt{s_{NN}} = 5.02$  TeV for different centrality classes. Based on the same technique, the transverse momentum spectra of the charged kaons for the minimum bias pp collisions at  $\sqrt{s} = 5.02$  TeV are also measured and the collision energy dependence is studied. Using MC simulated data, the geometrical acceptance of decaying kaons as well as the kink reconstruction efficiency inside the TPC detector have been studied in order to obtain the corrected charged kaons spectra.

### Content type

Experiment

### Collaboration

ALICE

### Centralised submission by Collaboration

Presenter name already specified

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