

## **D meson nuclear modification factors in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV, measured with the ALICE detector**

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The comparison of heavy flavour production in proton-proton and heavy-ion collisions allows to probe the properties of the high-density QCD medium formed in the latter and to study the mechanism of in-medium partonic energy loss. The ALICE experiment has measured the D meson production in pp and Pb-Pb collisions at the LHC at  $\sqrt{s} = 7$  and 2.76 TeV and  $\sqrt{s_{NN}} = 2.76$  TeV respectively, via the exclusive reconstruction of hadronic decay channels. The D meson decay vertices, displaced by few hundred microns from the main interaction point, are selected by exploiting the high-resolution tracking performance and the hadron identification capabilities of the ALICE detectors. The analyses of the  $D^0 \rightarrow K^- \pi^+$  and  $D^+ \rightarrow K^- \pi^+ \pi^+$  channels will be described and the preliminary results for the  $D^0$  and  $D^+$  nuclear modification factor will be presented.

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