Contribution ID: **591** Type: **Parallel**

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

Friday, May 27, 2011 3:00 PM (20 minutes)

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 $\mathrm{D}^0 \to \mathrm{K}^-\pi^+$ and $\mathrm{D}^+ \to \mathrm{K}^-\pi^+\pi^+$ channels will be described and the preliminary results for the D^0 and D^+ nuclear modification factor will be presented.

Primary author: Dr ROSSI, Andrea (Sezione di Padova (INFN)-Universita e INFN)

Presenter: Dr ROSSI, Andrea (Sezione di Padova (INFN)-Universita e INFN)

Session Classification: Heavy Flavors

Track Classification: Heavy flavor and quarkonia production