

Upsilon Production in Pb-Pb and p-Pb Collisions at Forward Rapidity with ALICE at the LHC

The ALICE apparatus at the LHC was designed and built to perform dedicated studies of the Quark-Gluon Plasma (QGP), a strongly interacting QCD matter of deconfined state, expected to be created in high energy heavy-ion collisions. In such collisions heavy flavours are produced at the very early stage of the interaction in the initial hard scattering processes and hence can be used to characterize the hot and dense medium. In particular the bottomonium family was proposed as a thermometer of the deconfined medium. In ALICE, the $\Upsilon(1S)$ meson can be measured in its dimuon decay channel at forward rapidity ($2.5 < y < 4.0$). In this talk, results on the $\Upsilon(1S)$ nuclear modification factor (R_{AA}) in Pb-Pb collisions at a $\sqrt{s_{NN}} = 2.76$ TeV will be discussed and will be compared to the measurement at midrapidity by CMS and to theoretical predictions. Also results on R_{pPb} and forward to backward yield ratio (R_{FB}) in p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV will be discussed.

Primary author: Mr KHAN, Palash (Saha Institute of Nuclear Physics, Kolkata, India)

Presenter: Mr KHAN, Palash (Saha Institute of Nuclear Physics, Kolkata, India)