

J/psi production in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV with ALICE at the LHC

The ALICE Experiment at the Large Hadron Collider (LHC) provides excellent capabilities to study charmonium production at low transverse momentum (p_T). At central ($|y| < 0.9$) and forward rapidity ($2.5 < y < 4$), J/ψ are reconstructed via their leptonic decay channels down to $p_T = 0$. We will present ALICE results on the inclusive J/ψ nuclear modification factor R_{AA} as a function of collision centrality, rapidity and p_{T} , as well as results on the $J/\psi \langle p_T \rangle$ in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. At mid-rapidity, we will also report the separation of prompt and non-prompt J/ψ down to $p_{\mathrm{T}}=1.3$ GeV/ c . The measurements provide, in combination with results from lower energies and theoretical predictions, detailed information on the different mechanisms related to the presence of the hot medium produced in heavy-ion collisions.

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