

# Quark Matter 2019 - the XXVIIIth International Conference on Ultra-relativistic Nucleus-Nucleus Collisions



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## **J/Psi production at forward rapidities in ultra-peripheral collisions in ALICE**

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The cross section for coherent  $J/\psi$  photonuclear production in ultra-peripheral collisions (UPC) at the LHC is sensitive to the low  $x$  behaviour of the gluon distribution function of the interacting lead nuclei and provides important constraints on the initial stages in heavy ion collisions.

The measurement of this process by ALICE in Pb-Pb UPC at forward rapidity using Run 2 data at  $\sqrt{s_{NN}} = 5.02$  TeV is reported. The measurement samples the gluon distribution of lead down to  $x \sim 10^{-5}$ . The increased statistics of the LHC Run 2 data sample resulted in a significant improvement in the precision of the measurement. When compared to theoretical predictions the results demonstrate the presence of moderate nuclear gluon shadowing. Details of the analysis procedure are discussed in this poster.

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