



Contribution ID: 56

Type: **Oral Presentation**

Ultra-peripheral collisions and photoproduction with ALICE at the LHC: results and perspectives

Thursday 10 September 2015 09:25 (25 minutes)

Ultra-Peripheral Collisions (UPC) occur when the colliding particles are separated by impact parameters larger than the sum of their radii, and the interaction is mediated by the electromagnetic field.

The ALICE Collaboration has studied exclusive photoproduction of ρ^0 , J/ψ and $\psi(2S)$ vector mesons in Pb-Pb collisions at the LHC. Exclusive production of J/ψ vector meson has also been studied in p-Pb collisions.

The results of the aforementioned studies, along with the constraints that they set on the nuclear and nucleon gluon distributions, will be discussed.

The study of the processes described above at higher statistics and higher energy with new data from LHC Run2 and the possible measurement of other processes, will also be presented during the talk.

Author: DE GRUTTOLA, Daniele (Universita e INFN, Salerno (IT))

Presenter: DE GRUTTOLA, Daniele (Universita e INFN, Salerno (IT))

Session Classification: Small-x

Track Classification: Small-x and saturation