Contribution ID: **136** Type: **not specified**

Incoherent and coherent diffractive production of J/ψ and Υ on heavy nuclei

Recently there has been much interest in the exclusive and semiexclusive
production of vector mesons in nucleus-nucleus collisions at the LHC.
These processes are induced by the strong electromagnetic field of one of the ions.
The relevant subprocesses are the coherent and incoherent diffractive photoproduction mechanisms. We develop the multiple scattering expansion
fro incoherent photoproduction in the color dipole model and use
new recent fits of the color dipole cross section to precise HERA data on F2 for the numerical predictions.

Summary

Based on

A.~Łuszczak and W.~Schäfer,
"Incoherent diffractive photoproduction of J/ψ and Υ on heavy nuclei in the color dipole approach,"
Phys.\ Rev.\ C {\bf 97} (2018) no.2, 024903

and ongoing work by us.

Primary author: SCHAEFER, Wolfgang (Institute of Nuclear Physics PAN)

Presenter: SCHAEFER, Wolfgang (Institute of Nuclear Physics PAN)