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## Exclusive Vector Meson Production in Ultrapерipheral Proton-Nucleus Collisions

We analyze the production of vector mesons  $\rho$  and  $J/\Psi$  in ultraperipheral proton-nucleus collisions with center of mass energies  $\sqrt{s} = 5, 02$  TeV and  $\sqrt{s} = 8, 16$  TeV. We calculate

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the differential cross sections using three phenomenological models that take into account the effects of parton saturation, and we present predictions for pCa and pPb collisions. We compare our predictions with the latest data from the CERN-LHC CMS collaboration. We demonstrate that the models are able to describe the data at small values of  $t$ . However, we observe a suppression compared to the limited available data at large values of  $t$ . We conclude that a future experimental analysis of the region of large  $t$  values is necessary for a more precise comparison between different approaches for the saturation regime.

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