



Contribution ID: 57

Type: **Talk**

Photoproduction of heavy meson pairs

Thursday 29 August 2024 11:00 (20 minutes)

In this presentation we argue that heavy quarkonia and open-charm pair photoproduction could be used as a probe of the partonic structure of the proton. At moderate energies, the exclusive production of quarkonia pairs can be used for studies of the generalized parton distributions (GPDs) of gluons in the proton. For open charm pair production, the cross-section gets comparable contributions from gluons and one of the light quark flavors. At high energies (small- x kinematics), the suggested channels can be used for studies of dipole and quadrupole forward scattering amplitudes, which characterize interaction with the target in the Color Glass Condensate (CGC) framework. We analyze both exclusive and inclusive production for charmonia- and bottomonia pairs and argue that these channel can be used for studies of the poorly known quadrupole scattering amplitude. We provide numerical estimates for the cross-sections in the kinematics of the ultraperipheral collisions at LHC, and the future Electron Ion Collider.

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Internet talk

Yes

Is this an abstract from experimental collaboration?

No

Name of experiment and experimental site

N/A

Is the speaker for that presentation defined?

Yes

Details

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