11th International Workshop on Multiple Partonic Interactions at the LHC



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Probing double parton scattering via associated open charm and bottom production in ultraperipheral pA collisions

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I will discuss a novel channel for phenomenological studies of the double-parton scattering (DPS) based upon associated production of charm and bottom quark-antiquark pairs in well-separated rapidity intervals in ultraperipheral high-energy proton-nucleus collisions. This process provides a direct access to the double-gluon distribution in the proton at small-x and enables one to test the factorised DPS pocket formula. I will present the corresponding theoretical predictions for the DPS contribution to this process at typical LHC energies and beyond and validate the use of the energy-independent (but photon momentum fraction dependent) effective cross section.

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