

## PROBING LOW X NPWF WITH PHOTONS IN D-AU COLLISIONS AT 200 GEV

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A strong suppression of hadron yields in d-Au collision has been seen at forward rapidities at RHIC which is connected to gluon saturation in the underlying PDFs. Direct photon measurements provide complementary insight towards the physical nature of these effects since they are directly sensitive to the gluon density being a colorless probe. Experimentally the ability to isolate direct photons from the electromagnetic background can be achieved with a high spatial resolution detector preceding the calorimeter. The MPCEX detector consists of a newly installed highly segmented silicon-tungsten preshower detector coupled to the forward ( $3.1 < \eta < 3.9$ ) electromagnetic calorimeter MPC in PHENIX. The detector has successfully acquired data for d+Au collisions at 200 GeV in May 2016. A broad overview of its physics case, performance and prospects for reconstruction of direct photons and  $\pi^0$  will be discussed here.