



# XXIV QUARK MATTER DARMSTADT 2014

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## Study of gamma-gamma interactions in pPb collisions at LHC with CMS

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Di-lepton production in photon-photon collisions is a benchmark process that allow for precise determination of the luminosity at the LHC. In particular in collisions, where at least one of the nuclei is a lead nucleus, the photon fluxes are large enough to make efficient use of it. In this analysis di-muon production during the pPb run in 2013 is analysed using dedicated triggers. Any hadronic contribution is removed by stringent exclusivity requirements. Yields of selected di-muon events are compared to high precision theoretical calculations of electromagnetic particle production from photon-photon collisions in the very periphery of the colliding nuclei.

### On behalf of collaboration:

CMS

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