

# 10th Edition of the Large Hadron Collider Physics Conference



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## Exclusive dilepton production in ultraperipheral Pb+Pb collisions in ATLAS

*Tuesday, 17 May 2022 19:00 (1 hour)*

Relativistic heavy-ion beams at the LHC are accompanied by a large flux of equivalent photons, leading to multiple photon-induced processes. One of the most basic processes, originating from the photon-photon interactions, is the exclusive production of lepton pairs. This poster presents new measurements of exclusive dielectron and dimuon production performed by the ATLAS Collaboration, using the data from ultraperipheral lead-lead collisions at  $\sqrt{s_{NN}} = 5.02$  TeV. The differential cross-sections as a function of several dilepton variables were measured in the inclusive sample, and for dielectron pairs also under the requirement of no activity in the forward direction. The results are compared with predictions from STARlight and SuperChic MC generators.

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