Contribution ID: **46** Type: **Talk**

Photon-photon fusion and tau g-2 measurement in ATLAS

Monday 1 August 2022 14:00 (30 minutes)

Relativistic heavy-ion beams at the LHC are accompanied by a large flux of equivalent photons. New measurements of exclusive dilepton production (electron, muon, and tau pairs) are discussed. We present the photon-induced production of tau pairs and constraints on the tau lepton's anomalous magnetic dipole moment. In addition, measurements of photon-induced electron and muon pair production are presented, which provide strong constraints on the nuclear photon flux and its dependence on the impact parameter and photon energy. Forward neutrons are utilized to provide an experimental handle on the impact parameter range sampled in the events.

Preferred track

Collectivity & Multiple Scattering

Subfield

HEP experiment

Attending in-person?

Yes

On behalf of collaboration?

ATLAS Collaboration

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