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Recent ATLAS Measurements of Ultra-Peripheral Heavy Ion Collisions¹ BENJAMIN GILBERT, Columbia University, ATLAS COLLABORA-TION — In Pb+Pb collisions at the Large Hadron Collider, fast-moving charged ions generate intense electromagnetic fields. At high center of mass energies, these fields are effectively modelled as a flux of quasi-real photons. These intense fluxes allow for photon-nucleus and photon-photon interactions to occur at significant rates, even without significant contributions from nucleus-nucleus interactions. This talk will present recent measurements performed by the ATLAS collaboration which use these "ultra-peripheral" collisions as a new experimental tool. It will focus on studies of dilepton and diphoton photoproduction as well as jet production via photon-nucleus scattering.

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