

Abstract Submitted
for the DNP20 Meeting of
The American Physical Society

Two-particle azimuthal correlations in photo-nuclear ultra-peripheral Pb+Pb collisions at 5.02 TeV with ATLAS¹ BLAIR SEIDLITZ, University of Colorado, Boulder, ATLAS COLLABORATION² — This talk presents a measurement of two-particle long-range azimuthal correlations in photo-nuclear collisions using 1.73 nb^{-1} of 5.02 TeV Pb+Pb data collected in 2018 by ATLAS with a dedicated photo-nuclear event trigger. Candidate photo-nuclear events are selected using a combination of the zero-degree calorimeters, forward calorimeters, and reconstructed pseudorapidity gaps constructed from calorimeter clusters and charged-particle tracks. Correlation functions are formed using charged-particle tracks in the event. A template fitting method is employed to subtract the non-flow contribution. Second-order (elliptic) flow coefficients are presented as a function of charged-particle multiplicity and transverse momentum, and significant non-zero values of the flow coefficients are observed. The results are compared to flow coefficients obtained in proton–proton and proton–lead collisions in similar multiplicity ranges.

¹The U.S. Department of Energy, Office of Science, Office of Nuclear Physics under Contract No. DE-FG02-00ER41152

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Date submitted: 24 Jun 2020

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