

Abstract Submitted
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Luminosity Monitoring at the OLYMPUS Two-Photon Exchange Experiment¹ COLTON O'CONNOR, Massachusetts Institute of Technology, OLYMPUS COLLABORATION — OLYMPUS collected data mainly in 2012 with beams of positrons or electrons incident on a gaseous hydrogen target. Since several models of two-photon exchange in the literature predict similar cross section ratios at many values of Q^2 , OLYMPUS seeks results with less than 1% uncertainty in order to select among them. Estimates from beam and target parameters indicate that approximately 4.5 fb^{-1} were collected, providing sufficient statistics. But the relative luminosity obtained with each beam species must be known more precisely, and to that end multiple independent detector systems were used to monitor the luminosity in real time. This talk will detail our methods and show comparisons between detector systems.

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