

Abstract Submitted
for the APR10 Meeting of
The American Physical Society

The OLYMPUS Luminosity Monitors¹ OZGUR ATES, Hampton University, OLYMPUS COLLABORATION — The OLYMPUS experiment at DESY has been proposed to measure the ratio of positron-proton and electron-proton elastic scattering cross sections to quantify the effect of two-photon exchange, which is widely considered to be responsible for the discrepancy between measurements of the proton electric to magnetic form factor ratio with the Rosenbluth and polarization transfer methods. In order to control the systematic uncertainties to the percent level, precise monitoring of the luminosities is required and will be achieved by measuring the elastic count rates at forward angles and low momentum transfer with tracking telescopes based on GEM (Gas Electron Multiplier) technology. Simulation results for the design and performance of the OLYMPUS luminosity monitors will be presented.

¹Supported by NSF.

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Date submitted: 26 Oct 2009

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