

Abstract Submitted  
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**Determination of the linear polarization of the Hall B tagged photon beam at JLab**<sup>1</sup> ARTHUR SABINTSEV, George Washington University, CLAS COLLABORATION — The CLAS g9a experiment is part of the N\* spectroscopy program at Jefferson Laboratory and has accumulated photoproduction data using a linearly polarized, tagged photon beam incident on a longitudinally polarized, frozen spin butanol target (FROST). Linearly polarized photons were produced via coherent bremsstrahlung from an electron beam incident on an oriented diamond crystal.<sup>2</sup> The degree of polarization depends on the position of the coherent bremsstrahlung peak and at some settings, may exceed 90%. The analysis of the spectrum shape was used to determine photon polarization. This report delineates the procedure and presents the results of these determinations.

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<sup>2</sup>U. Timm, “Coherent Bremsstrahlung of Electrons in Crystals.” (1969), *Fortschritte der Physik* **17**, 765-808.

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