

Abstract for an Invited Paper  
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**The Search for Missing Baryons with Linearly Polarized Photons at Jefferson Lab<sup>1</sup>**

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The set of experiments forming the g8 run took place in Hall B of Jefferson Lab during the summers of 2001 and 2005. These experiments made use of a beam of linearly-polarized photons produced through coherent bremsstrahlung and represent the first time such a probe has been employed at Jefferson Lab. The scientific purpose of g8 is to improve the understanding of the underlying symmetry of the quark degrees of freedom in the nucleon, the nature of the parity exchange between the incident photon and the target nucleon, and the mechanism of associated strangeness production in electromagnetic reactions. With the high-quality beam of the tagged and collimated linearly-polarized photons and the nearly complete angular coverage of the Hall-B spectrometer, we seek to extract the differential cross sections and attendant polarization observables for the photoproduction of vector mesons and kaons at photon energies ranging between 1.3 and 2.2 GeV. We achieved polarizations exceeding 90% and collected over six billion events, which, after our data cuts and analysis, should give us well over 100 times the world's data set. I shall report on the experimental details of establishing the Coherent Bremsstrahlung Facility and present some preliminary results from our first run.

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