

Abstract Submitted
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The JLAB Hall D Photon Beamline ALEXANDER SOMOV, Jefferson Lab, HALL D BEAMLINER TEAM — The CEBAF energy upgrade to 12 GeV provides an opportunity to produce high-energy photon beams which will be used for a new generation of photoproduction experiments. The GlueX, one of the flagship experiments of the 12 GeV program, will make use of a linearly polarized photon beam to search for mesons with gluonic excitations. The photon beam will be produced in the coherent bremsstrahlung process by 12 GeV electrons incident on a thin radiator. The fraction of linearly polarized photons can be increased by passing the photon beam through a two-stage collimation system. The energy of each photon in the energy range of interest can be determined by measuring the momentum of the recoil (“tagged”) electron in the tagger broad-band hodoscope or the microscope detectors. The photon flux and the polarization fraction can be measured using the pair spectrometer (and the triplet production polarimeter). The main Hall D photon beamline components will be presented.

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