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**Upgrades of the Polarized High Intensity Gamma-ray Source at Duke**

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The High Intensity Gamma-ray Source (HI$\gamma$S) at the Duke Free Electron Laser Laboratory (DFELL) is operated jointly by the DFELL and the Triangle Universities Nuclear Laboratory. The gamma-ray beam is produced by Compton back scattering of UV photons off high-energy electrons circulating in the storage ring. A distinctive feature of this gamma-ray source is that the Compton scattering occurs inside the optical cavity of a FEL. The gamma-ray beam is nearly 100% polarized and its energy resolution is adjustable by collimation down to 1%. Major upgrades to the accelerators and the UV FEL at the DFELL will be completed in 2006 and 2007, respectively. These upgrades will increase the gamma-ray beam intensity and the capability for extending the energy reach of HI$\gamma$S to slightly beyond the threshold for photoproduction of pions. The upgraded HI$\gamma$S facility will be described and examples of proposed experiments to probe hadron structure using the beam at HI$\gamma$S will be presented.