

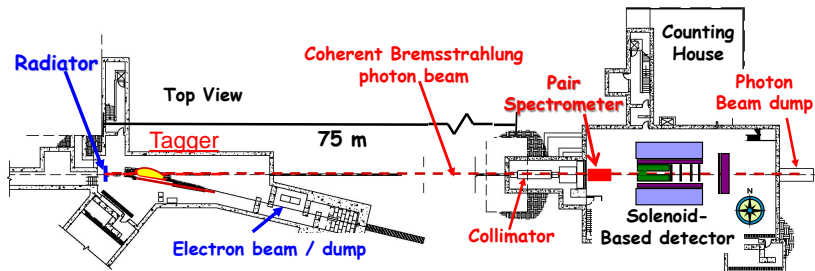
Introduction to Hall D

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Tagger magnet review, JLab, 2009

Hall D



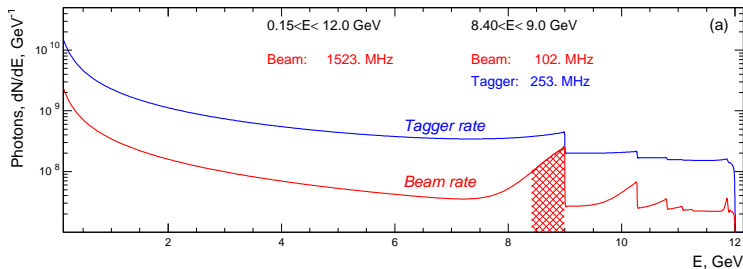
Physics Highlights

- Tagged photon beam
- GlueX - search for “exotic” mesons
- Other physics: PRIMEX...

Beam

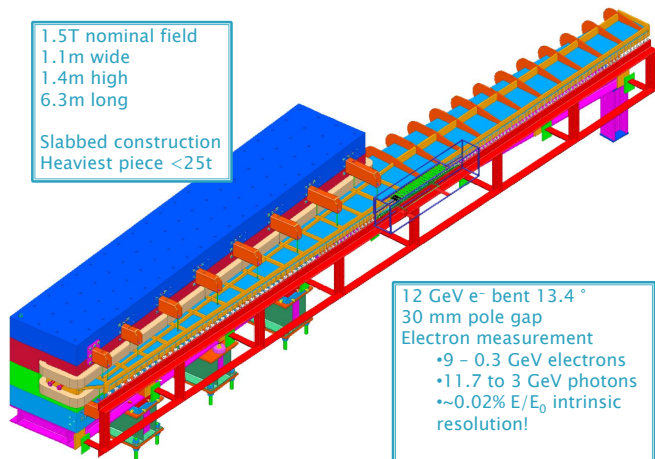
- e^- 12 GeV $< 3\mu\text{A}$
- Diamond radiator 10^{-4} RL
- e^- non-scattered - dump, scattered - p measured

Photon Beam



- Diamond \Rightarrow coherent radiation \Rightarrow linear polarization at small angles
- $\gamma < 100$ MHz in 8.4 – 9.0 GeV (polarized region)
- Tagger should provide $\frac{\sigma E}{E} \sim 0.1\%$ for scattered e^-
 - $< 0.5\%$ - GlueX
 - $< 0.1\%$ - PRIMEX

Tagger Magnet



Scheduled procurement: FY 2010-2011

Charges

- 1 Evaluate the magnet specs and the basic design
- 2 Advice on the procurement strategy