D17g, Mini-Symposium: Modern Calorimetry Technology at JLab and EIC: Past, Present and Future

The new Electromagnetic Calorimeter at the Jefferson Lab Eta Factory IGAL JAEGLÉ, on behalf of the GlueX Collaboration, Thomas Jefferson National Accelerator Facility — The newly upgraded Electromagnetic Calorimeter (ECal) at the Jefferson Lab Eta Factory (JEF) represents a significant enhancement to the existing GlueX setup, particularly the Forward Calorimeter (FCAL). In this upgrade, a  $80 \times 80 \text{cm}^2$  Pb-glass matrix surrounding the beam-hole or 400 Pb-glass elements has been replaced by 1600 PbWO<sub>4</sub> crystals. This replacement aims to improve the polar angle coverage, resolution, and granularity, specifically below 4<sup>0</sup>. The upgraded ECal enables the precise measurement of rare  $\eta^{(')}$  decays and the Compton validation channel. This abstract will delve into the construction details of ECal and its preparation for the inaugural beam in 2024

> Igal Jaeglé ijaegle@jlab.org Thomas Jefferson National Accelerator Facility

January 2, 2024