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Newport News, VA

***GlueX/Hall D Calorimeter Final Design and Safety Review***  
**February 19-20, 2008**



# Calorimeter Conceptual Design Report

## GlueX/Hall D

Section 1:  
Physics and Calorimeter Performance Metrics

Section 2:  
BCAL – The Barrel Calorimeter

Section 3:  
SiPM Readout for BCAL

Section 4:  
FCAL – The Forward Calorimeter

Section 5:  
Calorimeter Simulation and Reconstruction

# **1 Physics and Calorimeter Performance Metrics**

We start this report on GLUEX calorimetry by discussing the physics goals of the GLUEX project – mapping the spectrum of gluonic excitations starting with exotic hybrid mesons. We show that the search for exotic mesons depends critically on detecting and measuring the four-momenta of charged particles and photons resulting from