

Expression of Interest: Electron Endcap Electromagnetic Calorimeter (crystal/glass)

Institutions:

- CUA (contact: Tanja Horn)
- Lehigh U. (contact: Rosi Reed)
- MIT and MIT-Bates Research and Engineering Center (contact: Richard Milner)
- U. Kentucky (contact: Renee Fatemi)
- AANL (contact: Ani Aprahamian)
- eRD1 collaborators:
 - IJCLab-Orsay (contact: Carlos Munoz-Camacho)

The team brings experience with developing and building EM calorimeters at Jefferson Lab, e.g. the TF-1 BigCal, the PbWO₄-based CLAS inner calorimeter, HPS and the Hall C Neutral Particle Spectrometer, the PbGl calorimeters, and the PbF₂ DVCS calorimeter, the F-101 HERMES calorimeter, and the STAR ECal at BNL, as well as expertise with and vendor presence for glass scintillators.

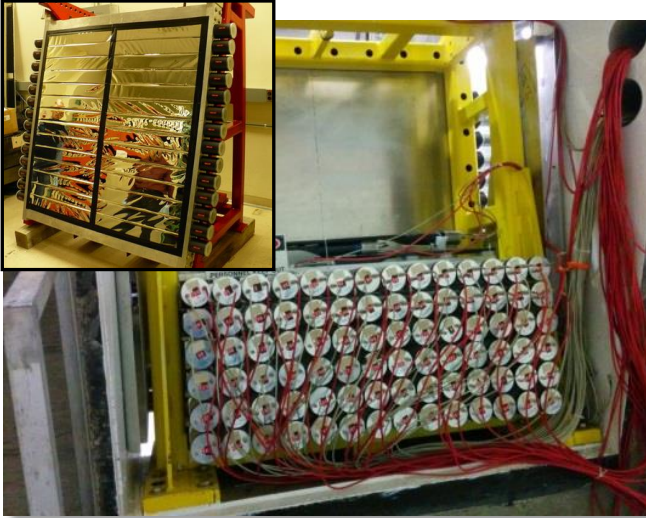
Activities towards EoI:

- First meeting on 6/25/20: initial discussion of questionnaire
- Next meeting planned for 7/20/20

To join: email
hornt@cua.edu

Examples of Infrastructure and Expertise

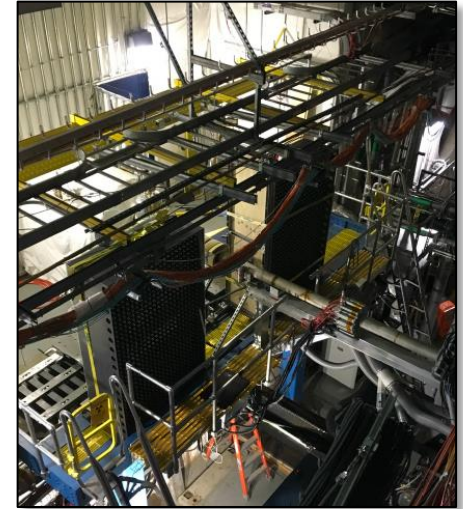
Selected calorimeters



SHMS EMCAL: 252 TF-1 blocks

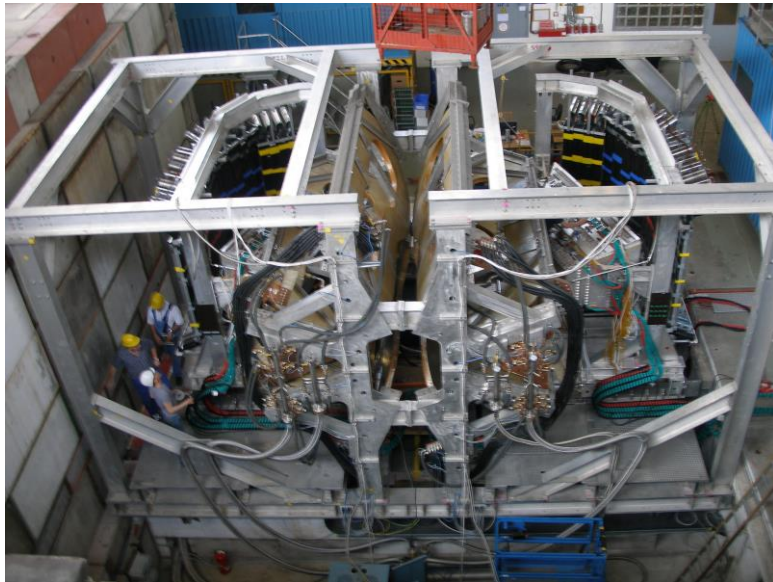


NPS: 1080 PbWO_4
(CRYTUR, SICCAS)



STAR: installed ECAL of
the forward upgrade

One infrastructure example



OLYMPUS (BLAST) spectrometer: designed,
fabricated, commissioned and operated at Bates

- Track record in the design, fabrication, commissioning, and operation of EMCALs
- Access to students and senior staff, plus technical support at some institutions
- May also be able to help with the smaller forward/backward calorimeters