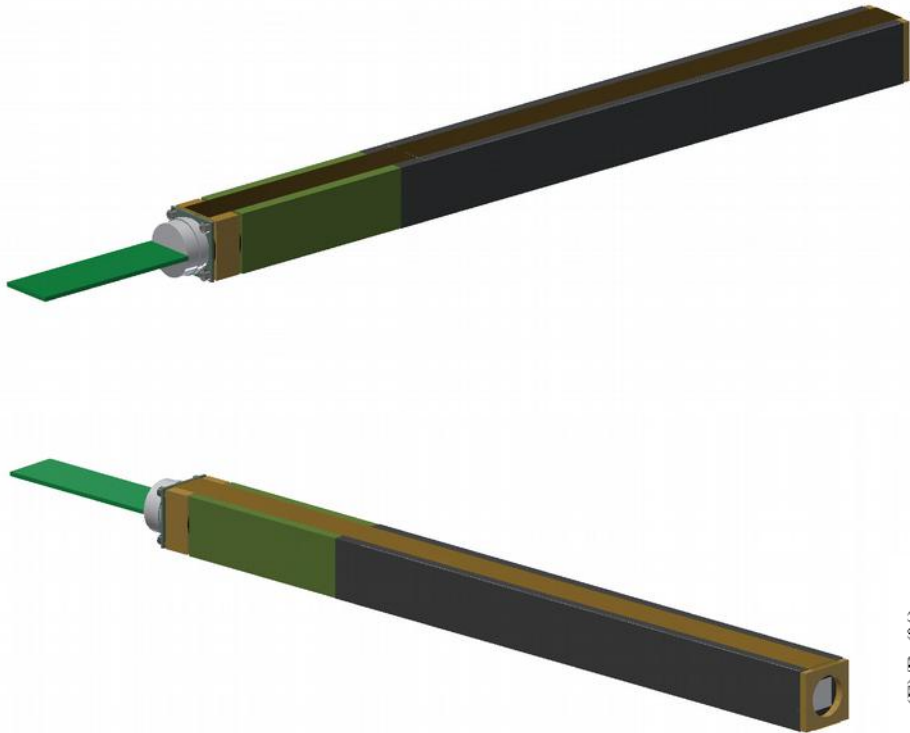
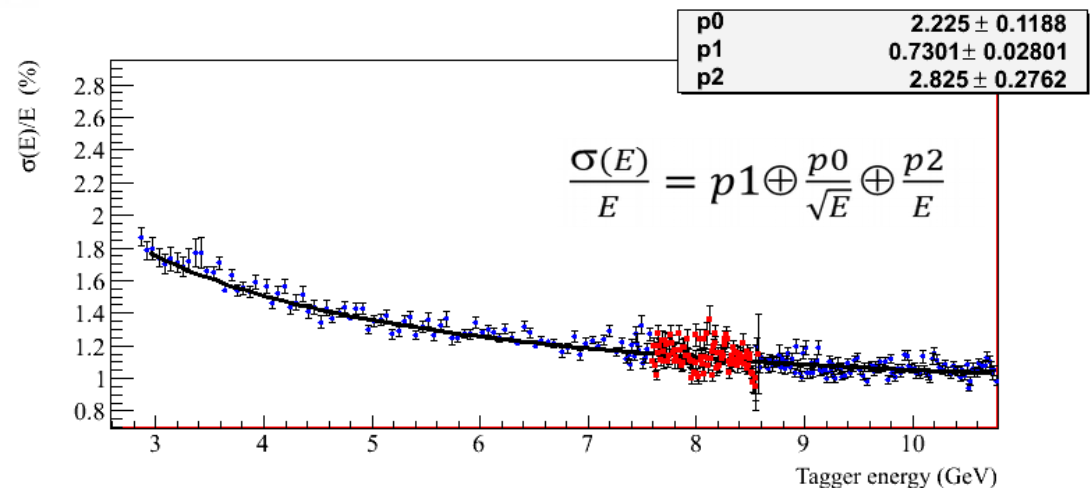


Electron Endcap						
Technology	Performance (energy resolution)	Block size	Estimated number of blocks for EIC	Space required along z (must/should/like)	Time needed until mass production	Existing detector (material)
PbWO4		2x2x20cm3	2500		Available from two vendors (SICCAS, CRYTUR)	NPS, FCAL, PANDA
DSB:Ce		4x4x40cm3	2400-3400		2-3 years	
Barrel						
W-powder/SiFi					Full industrial scale production available	
High-densisty shashlik					2-3 years	
DSB:Ce		4x4x40cm3	4750		2-3 years	
PbSc+PbGl		5.5x5.5x33 cm3, 4x4x40cm3	15552, 9216			PHENIX EMCAL
Pb/Sc						JLAB BCAL

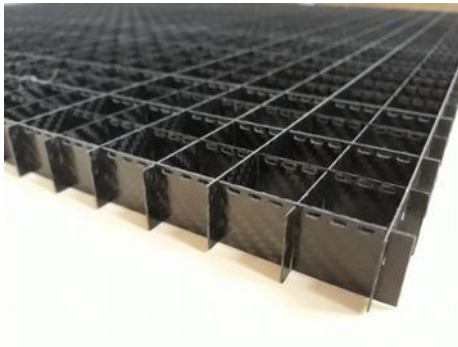
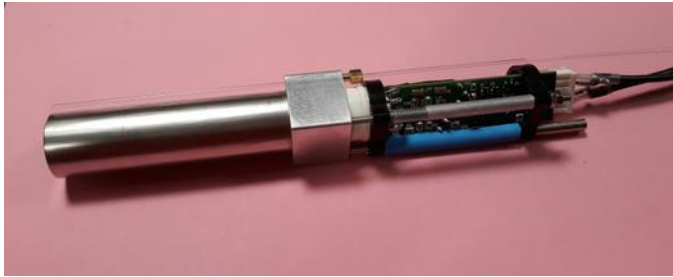
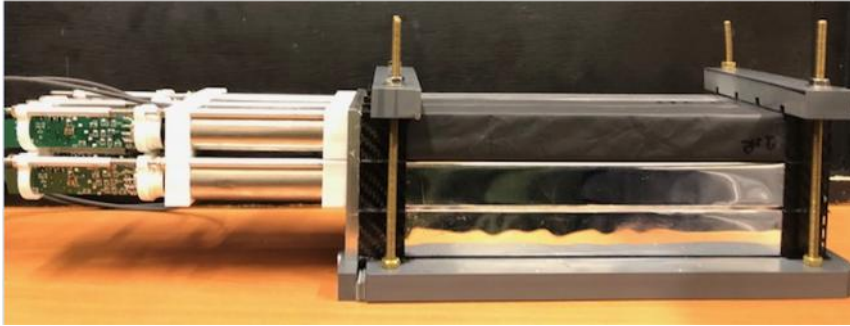
Jlab NPS prototype/CCAL type PWO+PMT ECAL module



- 12x12 matrix (140 PWO crystals)
- ESR+Tedlar wrapping
- 25um strip brass
- G-10 PMT housing
- PMT Hamamatsu R-4125
- 100 um mu-metal cylinder
- Active HV divider base
- HV + signal cable to patch panel
- 296 mm length w/o divider
366 mm length with divider
- 20.9 mm x 20.9 mm width
- Status: measured with commissioning beam



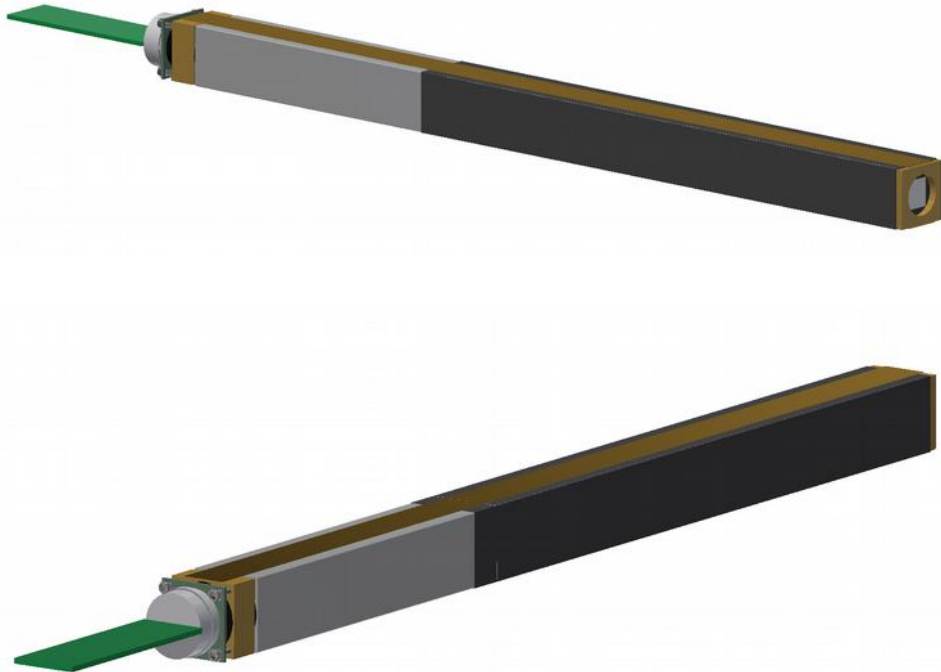
Jlab NPS PWO+PMT ECAL module



- 30x36 matrix (1080 PWO crystals)
- ESR wrapping
- Carbon honey-comb structure frame
- mu-metal housing
- PMT Hamamatsu R-4125
- Active HV divider base
- HV +signal flat rigid cable to patch panel
- 296 mm length w/o divider (?)
366 mm length with divider (?)
- 20.9 mm x 20.9 mm width
- Status: frame assembly is ongoing

Jlab HallD FCAL-insert type PWO+PMT module

- 80x80 matrix (~1600 PWO crystals)
- ESR+Tedlar wrapping
- 25um or 50 um strip brass
- Acrylic cylindrical light guide glued to PMT
- PMT Hamamatsu R-4125
- Soft iron 1020 PMT housing
- 300um mu-metal welded cylinder
+50um mu-metal cylinder capton covered
- Active HV divider base
- HV + signal cable to patch panel
- 333 mm length w/o divider
404 mm length with divider
- 20.9 mm x 20.9 mm width
- Status: assembly preparation stage



Jlab 3x3 prototype Glass+SiPM module



- 3x3 matrix
- ESR+Tedlar wrapping
- Hamamatsu MPPC 13360 6x6mm² 25um cell
- SMA to LEMO cable to patch panel
- 427 mm length with PCB
- Width 20.9x20.9mm²
- Readout: Waveboard required one cable only
F250 required one BIAS for 4channel
and preamp boards for each channel
- SiPM temperature control not required if
crystals inside of a thermostat (?)
- Status: glass bars production/polishing in
progress



Jlab 3x3 prototype PWO+SiPM module



- 3x3 matrix
- ESR+Tedlar wrapping
- Hamamatsu MPPC 13360 6x6mm² 25um cell
- SMA to LEMO cable to patch panel
- 227 mm length with PCB
- 20.9 mm x 20.9 mm width
- Readout: Waveboard required one cable only
F250 required one BIAS for 4channel
and preamp boards for each channel
- SiPM temperature control not required if
crystals inside of a thermostat (?)
- Status: assembled, cosmic tests ongoing,
beam tests interrupted(COVID-19)