



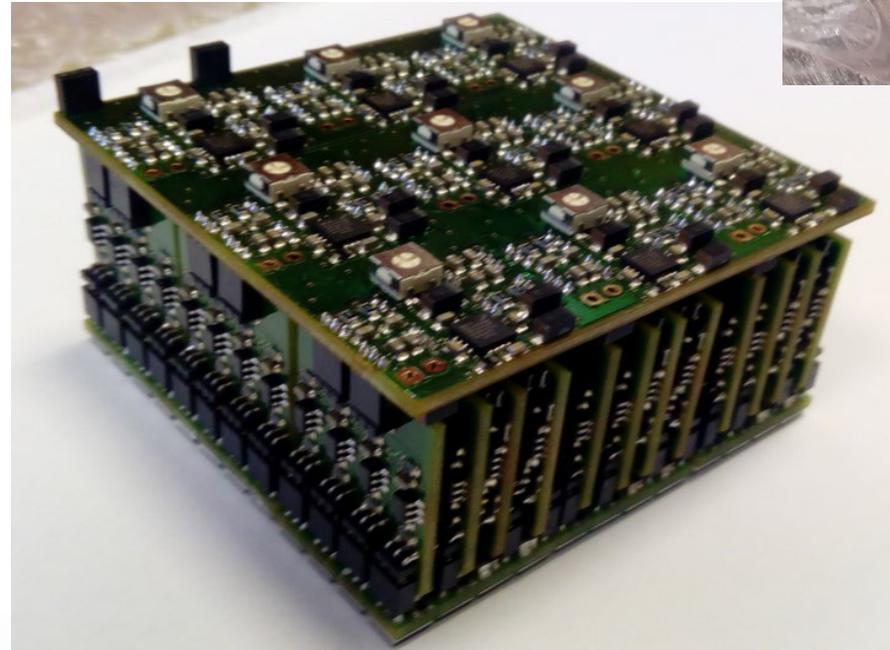
Crytur update on JLAB prototype

September 17th 2021

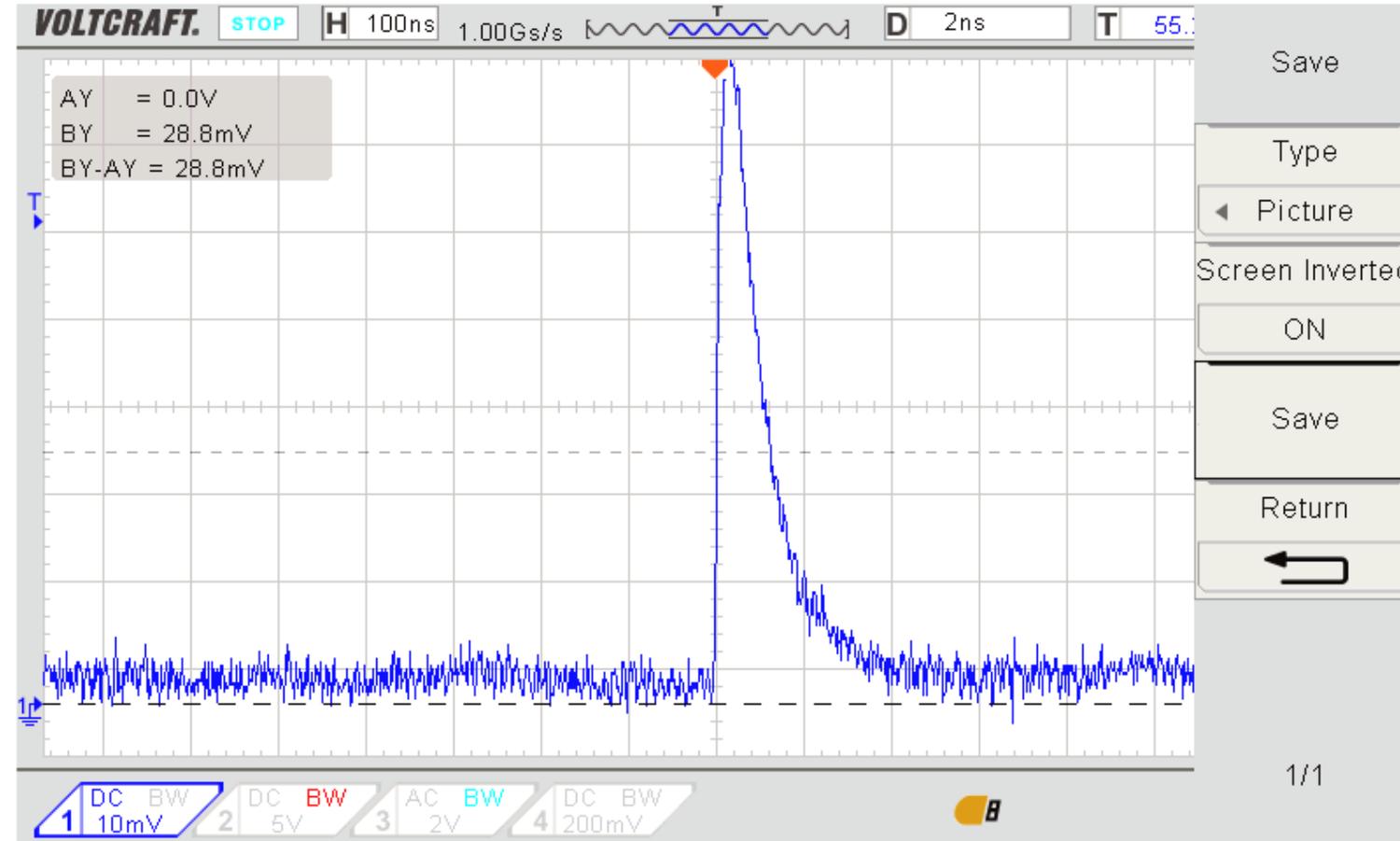
Tests performed at Crytur

Testing of electronics using ^{22}Na , ^{137}Cs , ^{232}Th

- ✓ with YAP:Ce (370nm – 25kph/MeV) - room temperature $\sim 22^\circ\text{C}$
- ✓ with LaCl_3 (350nm – 30-50kph/MeV) - room temperature $\sim 22^\circ\text{C}$
- ✓ with PWO (420nm -30ph/MeV) (CP2) at -25°C (x4 increase of LY rel. to RT)

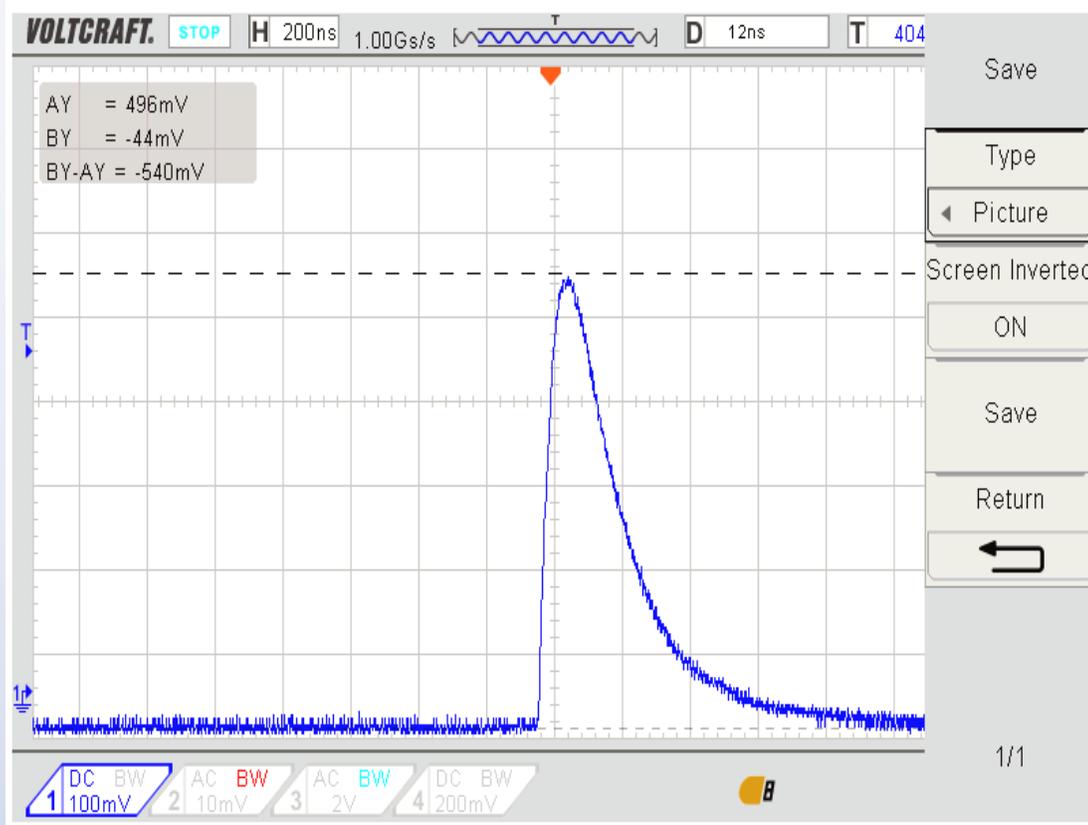


YAP:Ce (^{22}Na , 1274.5 keV) + 1 electronics unit (4 SiPMs) 1 preamp per SiPM, summed

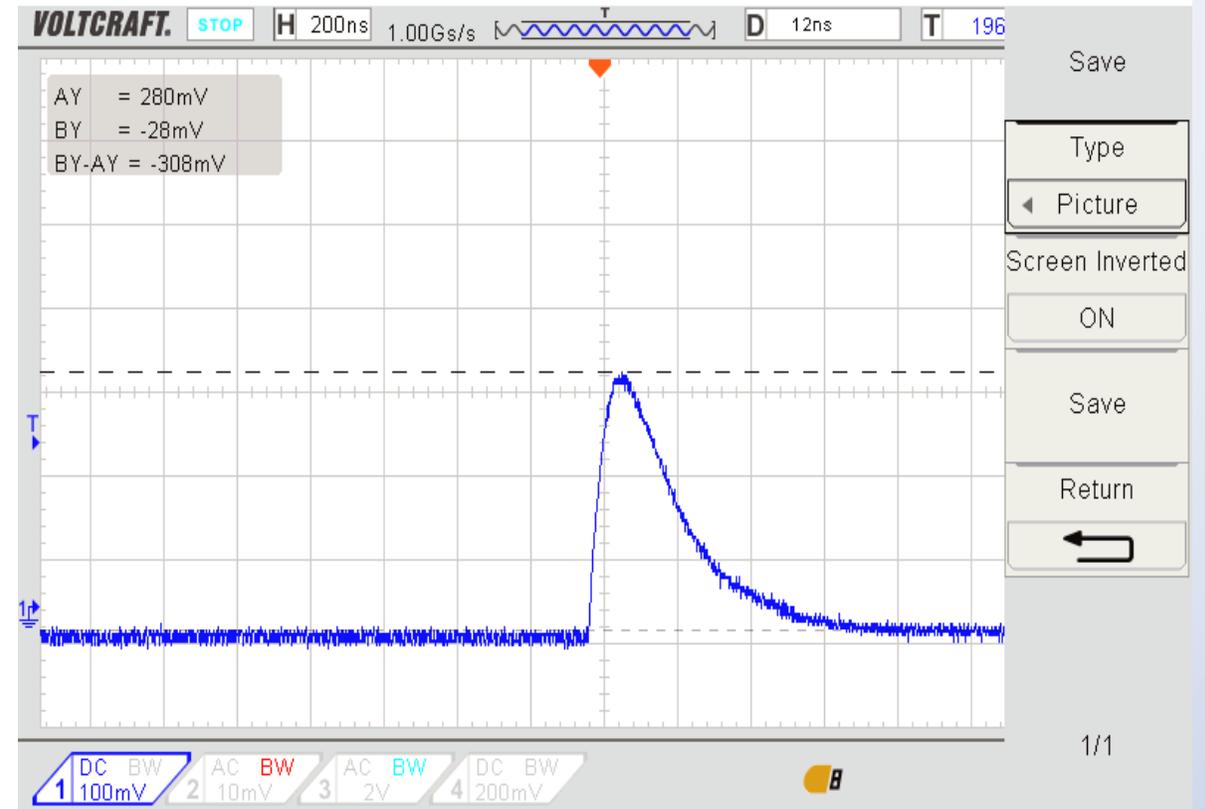


LaCl₃

²³²Th 2614 keV

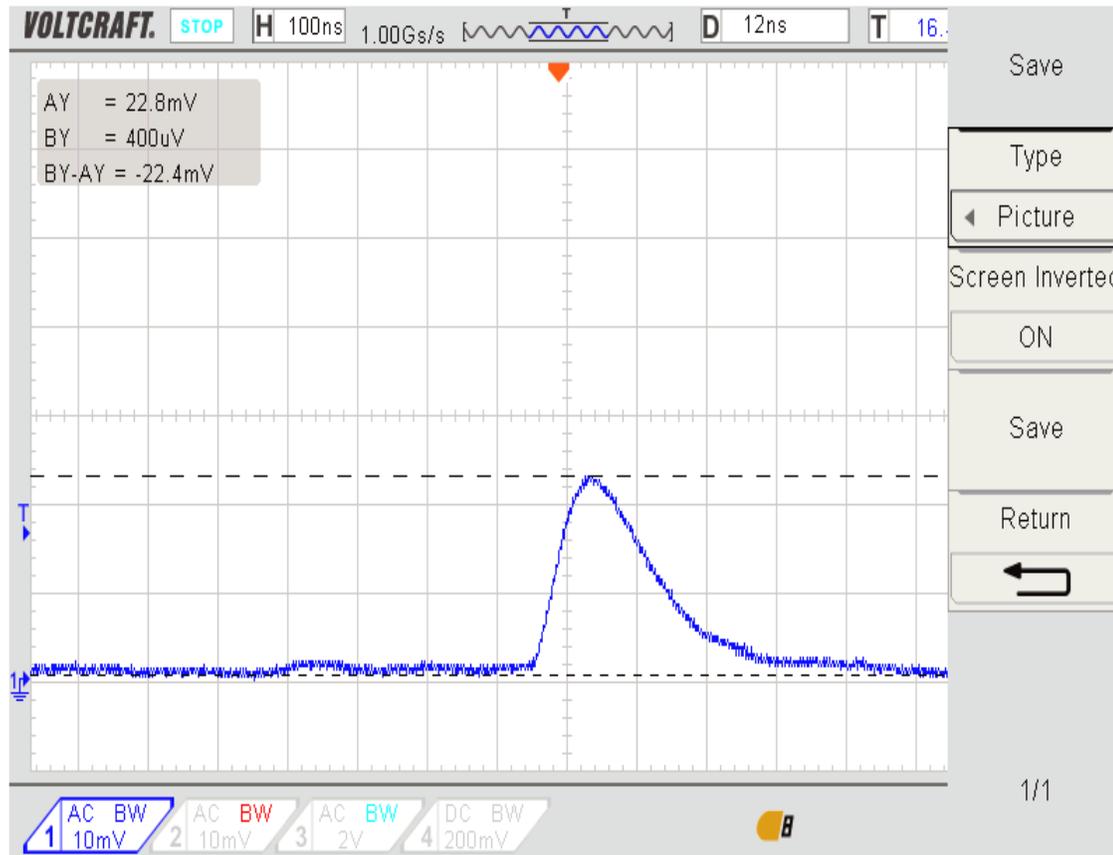


²²Na 1274.5 keV

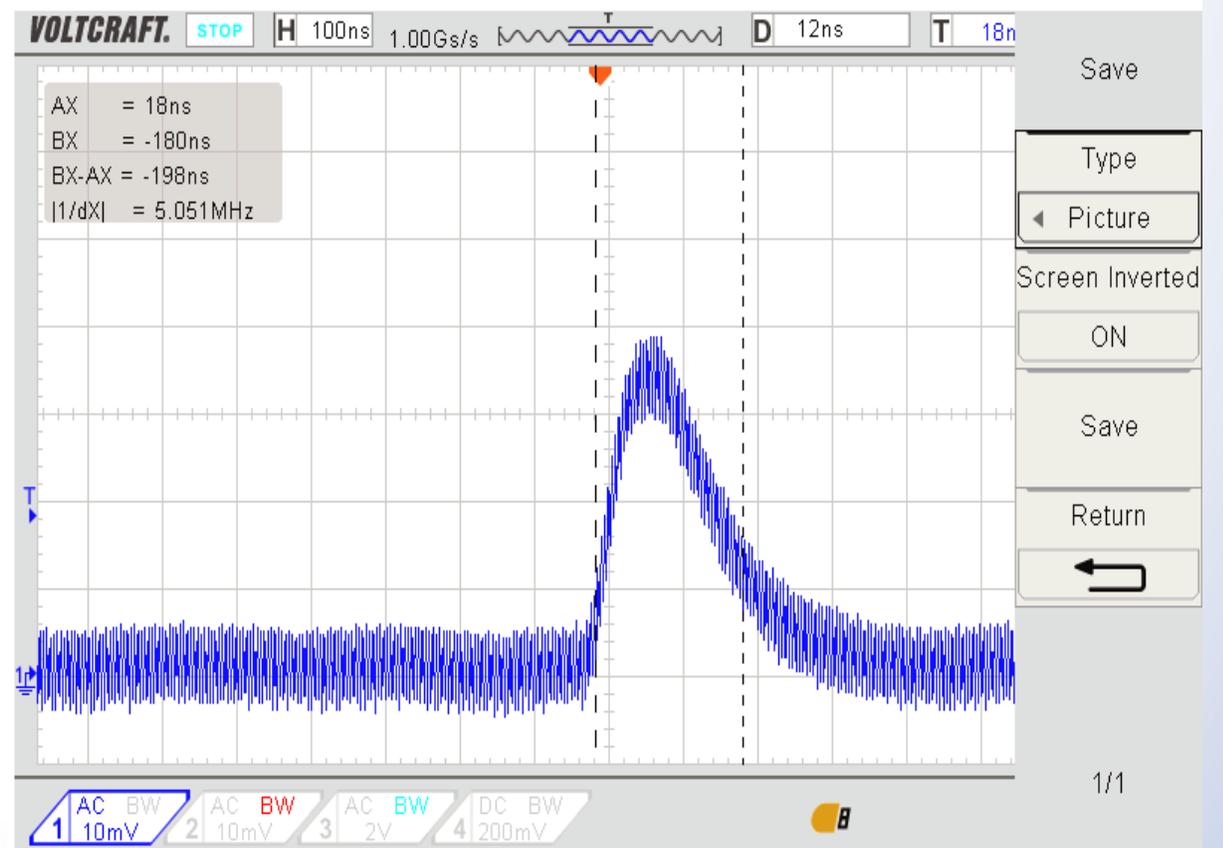


PWO(at -25°C)

^{137}Cs 662 keV

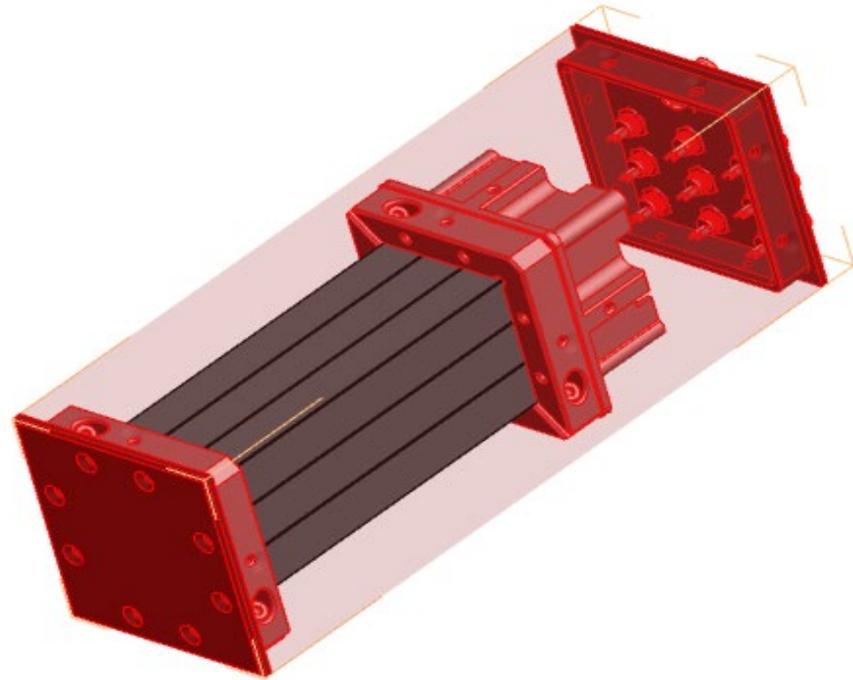
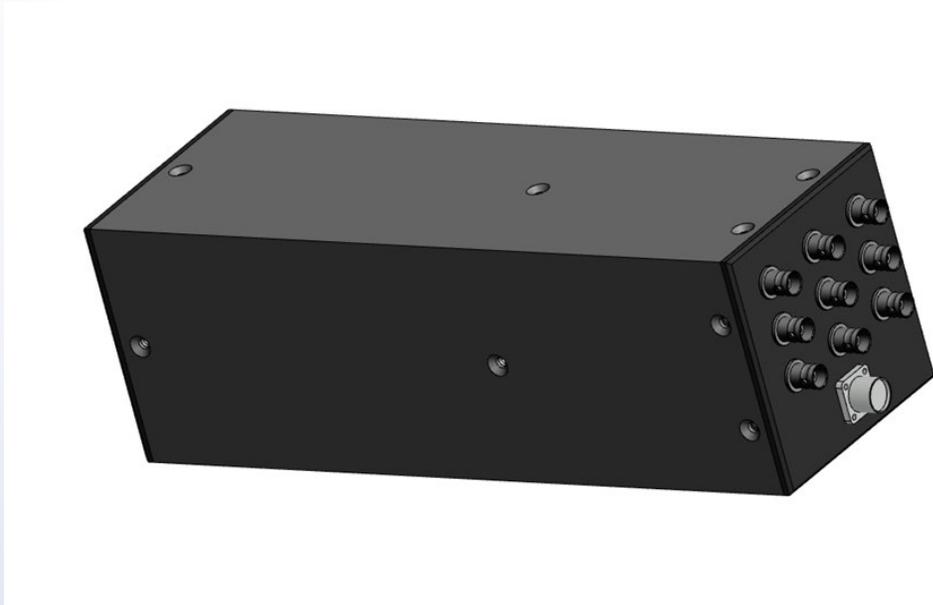


^{22}Na 1274.5 keV



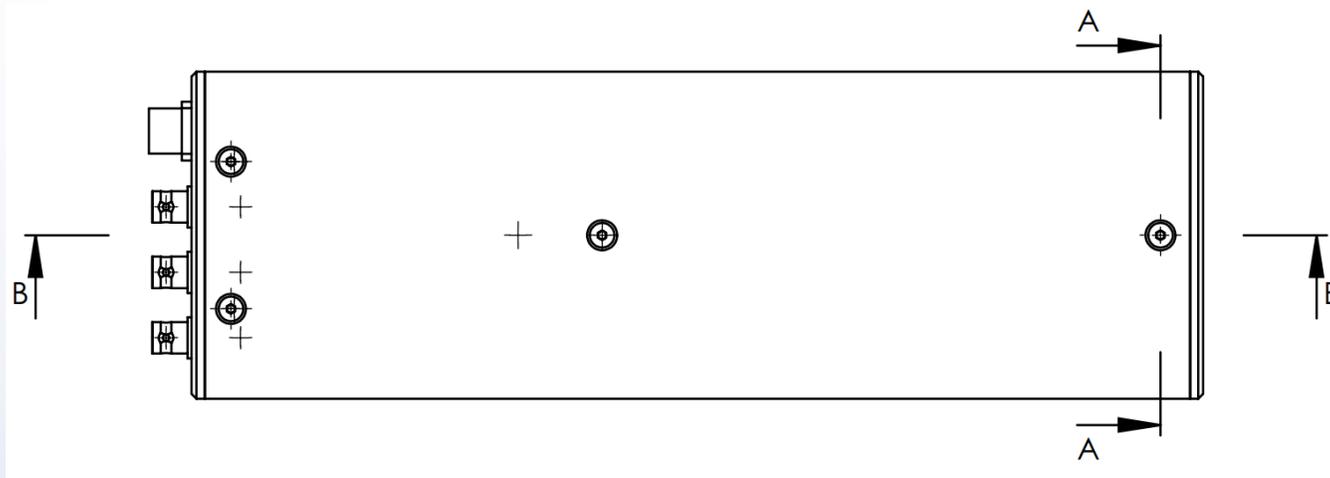
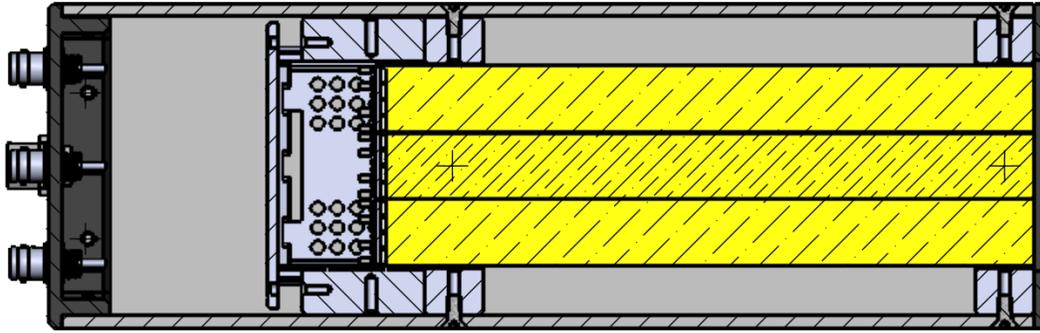
Design

- Assembly at JLAB?
- Shipping logistics (configuration, assembly, date)
- Should we aim to ship on October 10th?

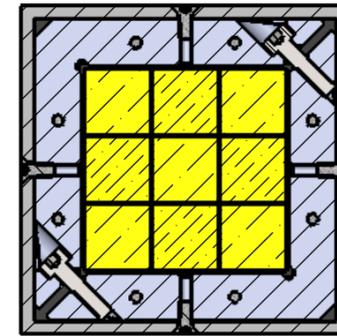


Development design

B-B



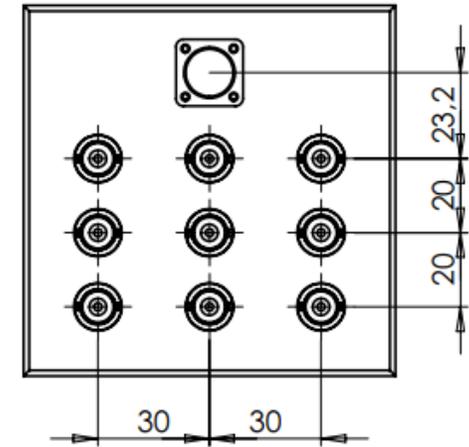
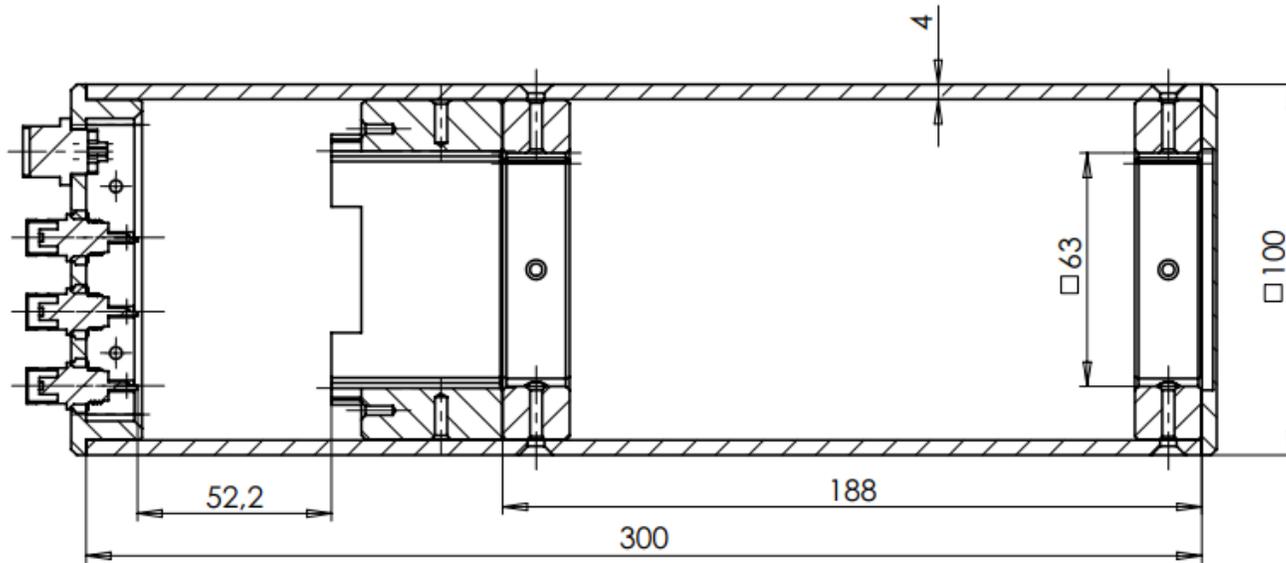
A-A

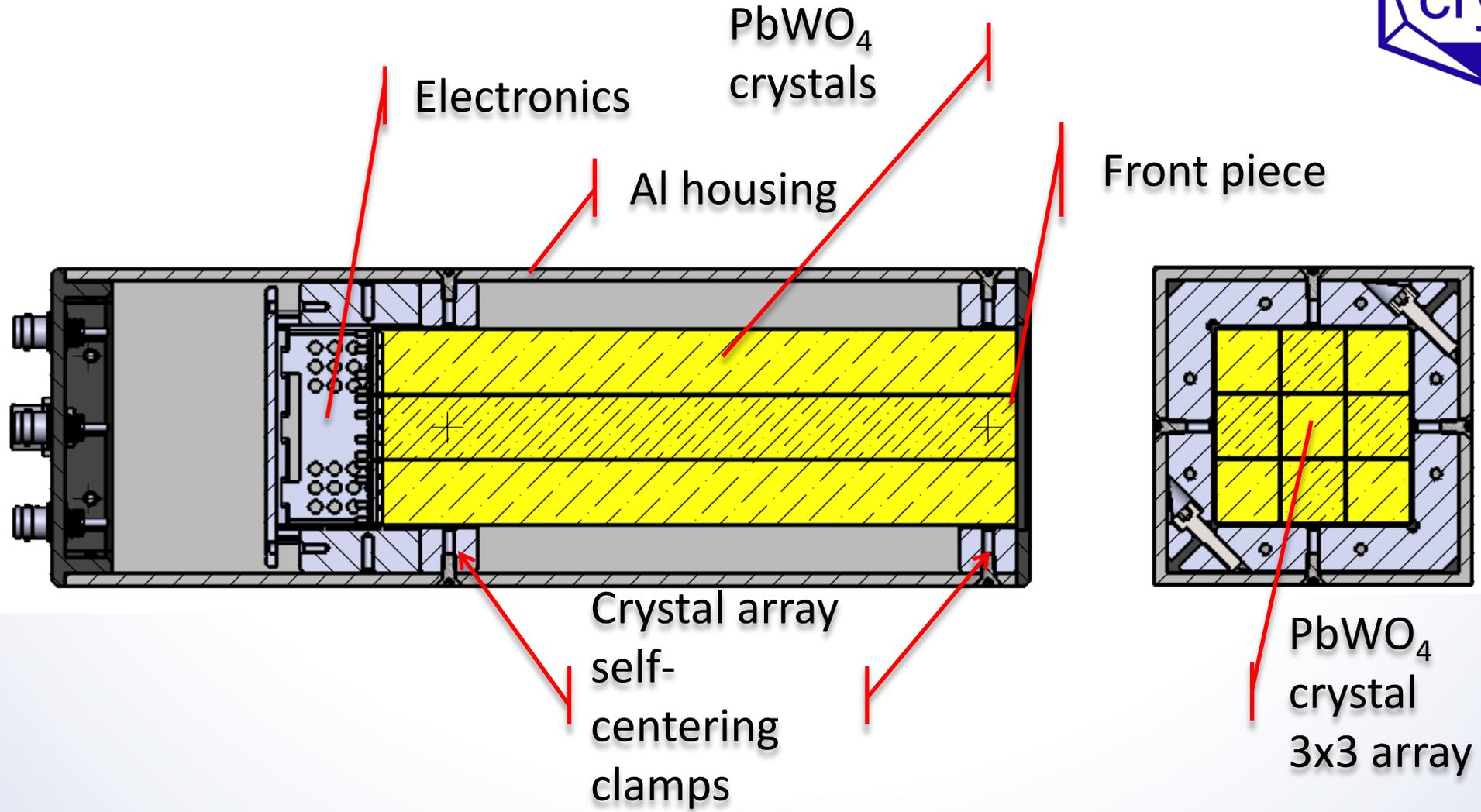


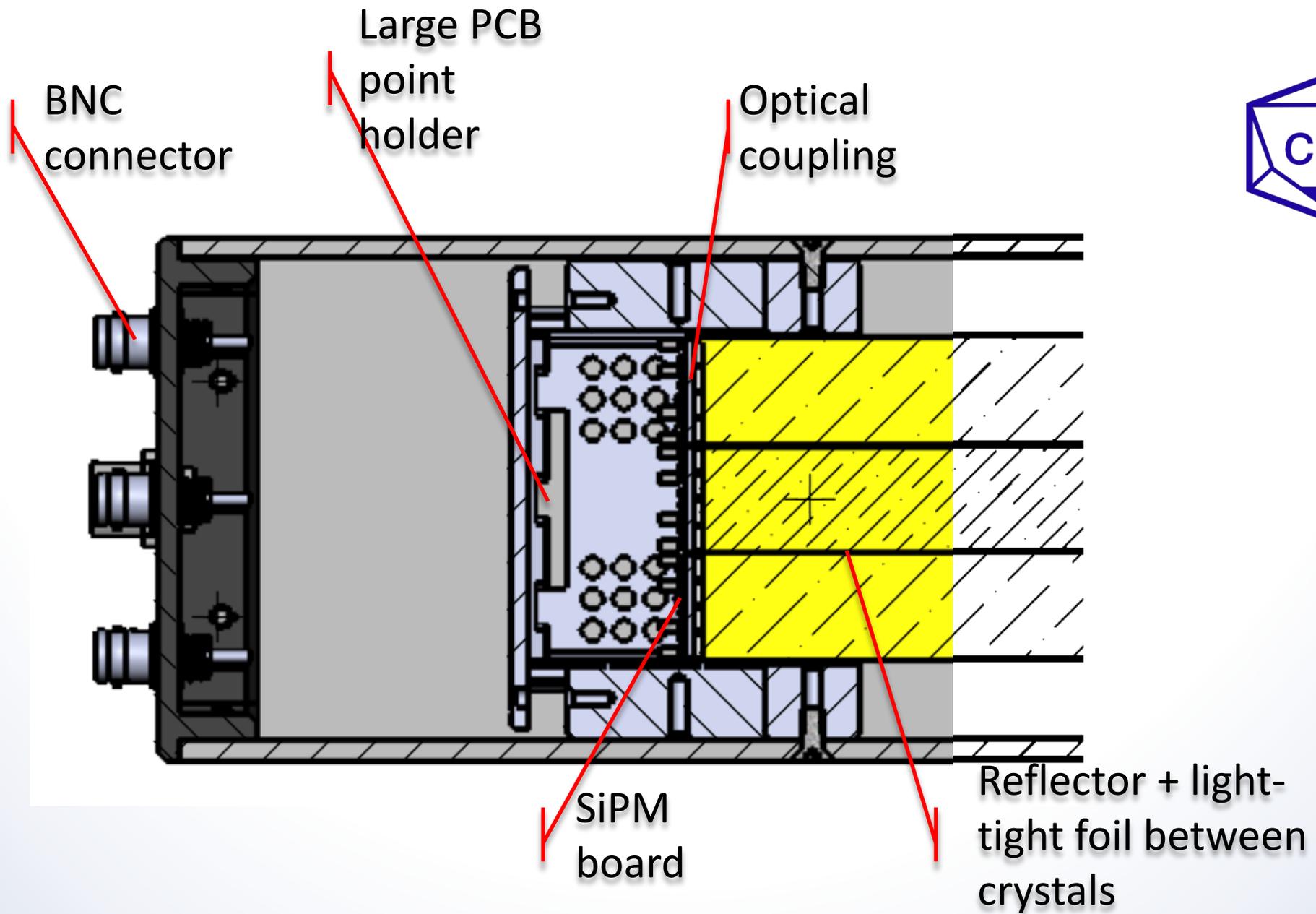
Development design with dimensions

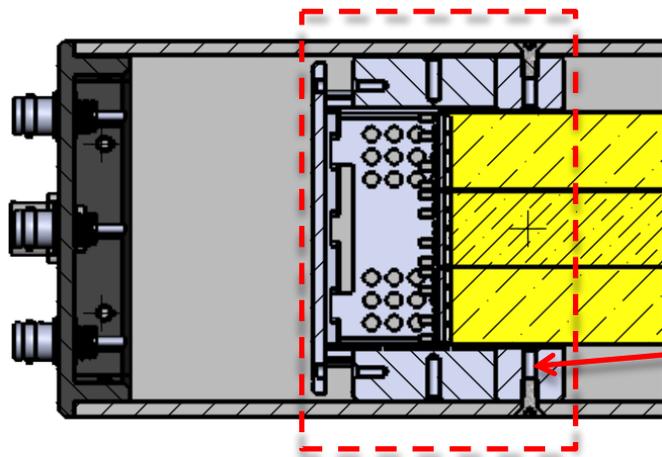


A-A









Crystal array clamp

(Might add springs for push compensation on here)

Electronics holder

Venting

Large PCB point holder

