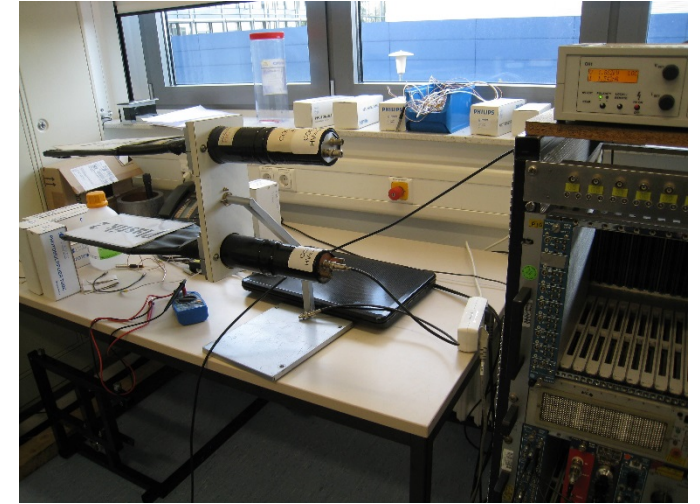


Facilities at Giessen



Crystal storage room

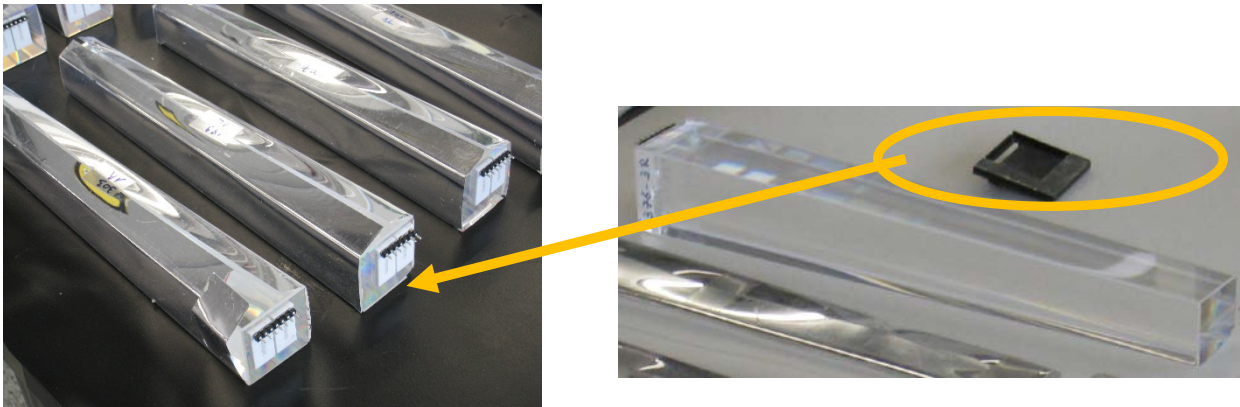


Raw material for crystals

Reflector Optimizations for light collection

- Initial light yield measurements at CUA differ from those made at Giessen by a factor of two – one possible explanation is the light collection at the readout end of the crystal (CUA currently uses a 19mm diameter PMT)
 - Impact of light loss at readout end needs to be checked
- Possible optimizations if there is a significant impact:

Install reflector at the readout end of the crystal like done for PANDA APD readout

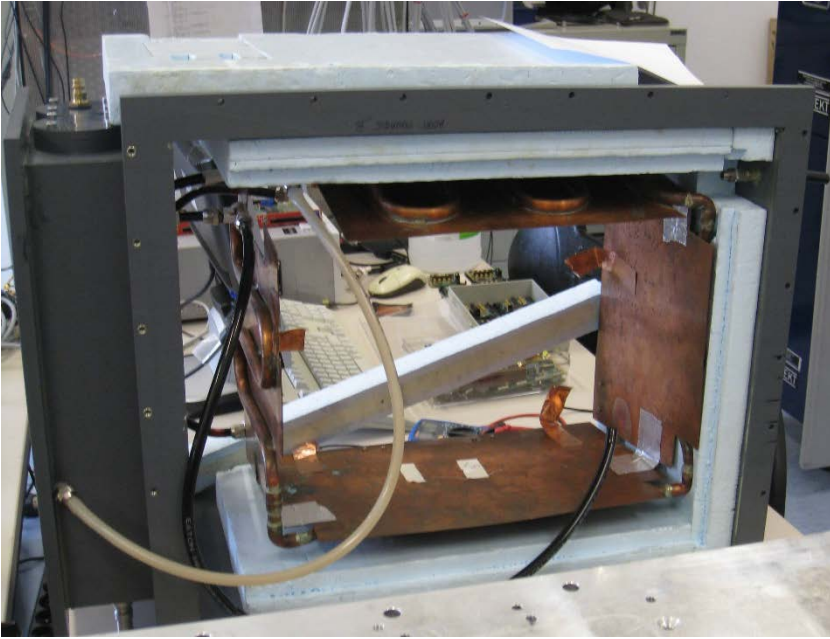


Reflector “cap” at end of crystals for APD readout setup

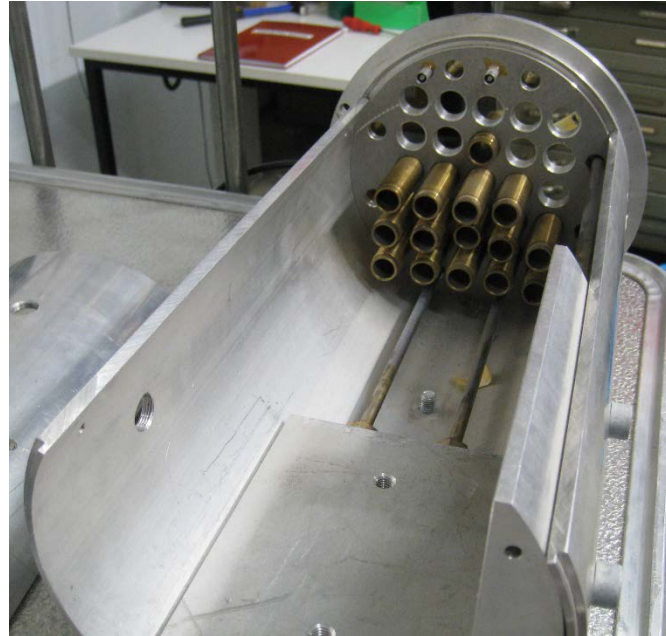
Reflector “cap” example for readout with PMT



Prototypes



Insulated copper frame for cooling



Prototype with cooling

Prototype with carbon fiber matrix – could use this one with combination of CRYTUR and SICCAS crystals

