

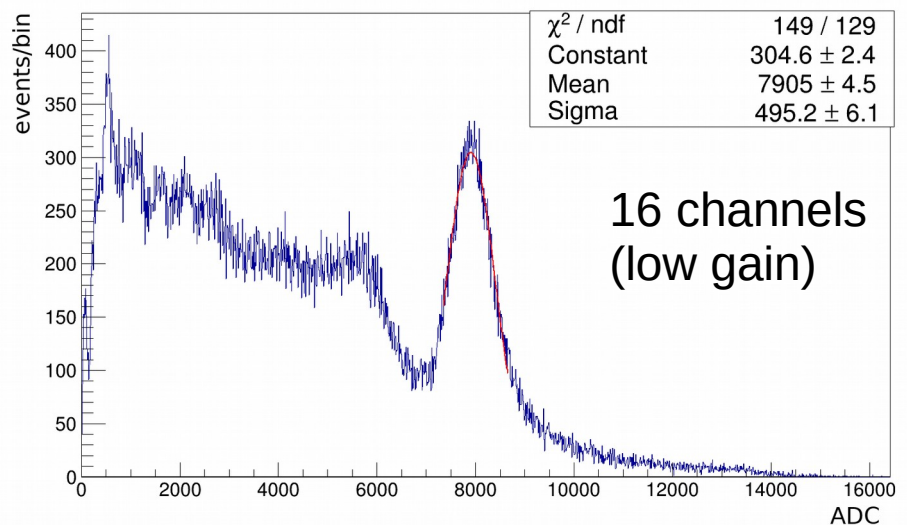
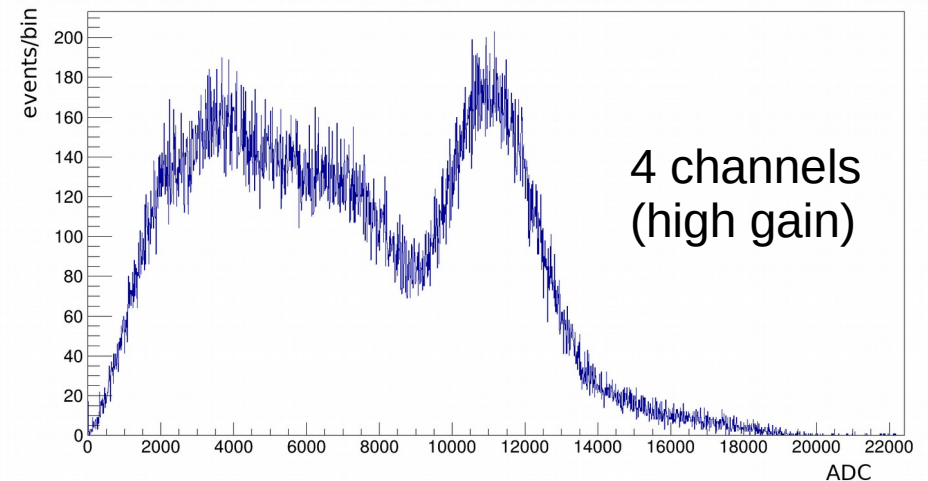
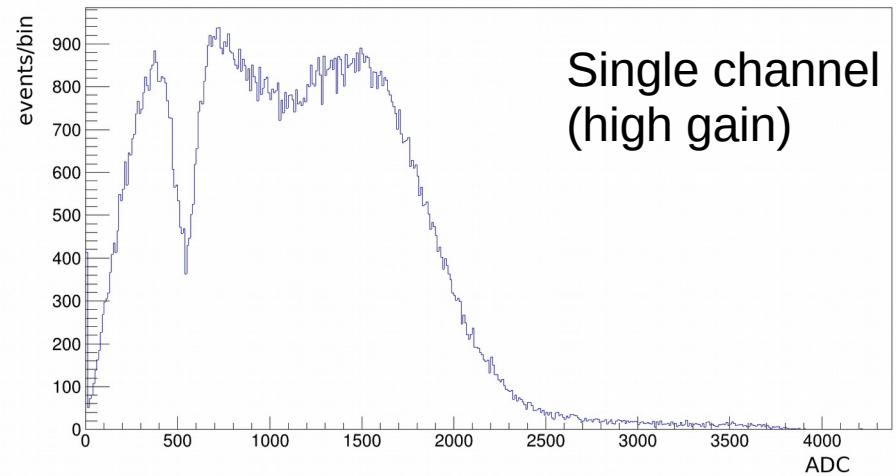
Action Items!

WP0 (Management)

- Write ESA advisory bodies proposal for POLAR-2
- Update PEA (PRODEX Experiment Arrangement)
- Get answers from ESA....
- Fix next meeting with CSU
- Organize second collaboration meeting
- Get answers from CSU
- Finish TDR!
- Organize Beam Test (ESRF)

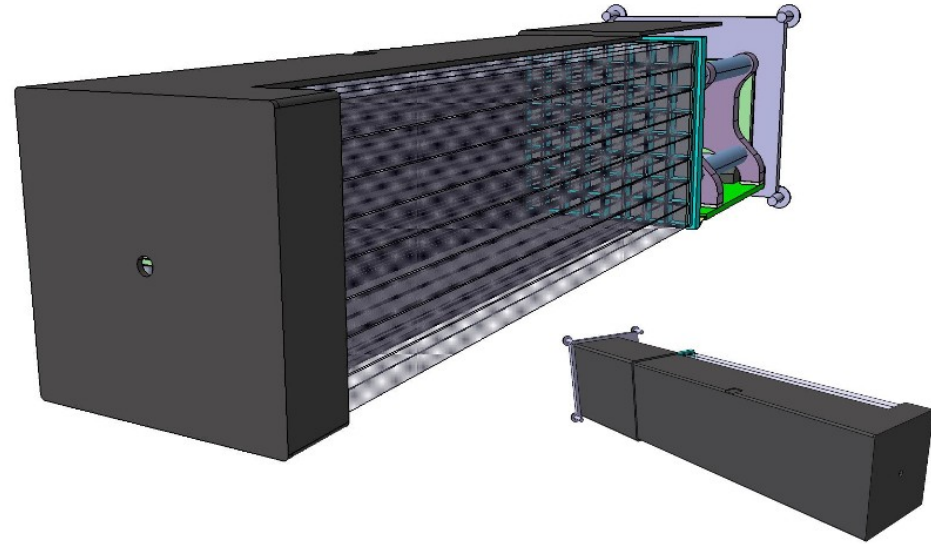
WP9: First data CeBr3 crystal

- Received CeBr3 crystals from Jochen
- Simply coupled to SiPM with grease + some kapton tape to keep things in place
- Reading out 16 SiPM channels (4x4 array in centre of the 60x60 mm² crystal)
- Pulse shape from scope: rise time ~50 ns, decay time ~400 ns
- Spectrum was taken with Cs137. Using a single channel things don't look great. Summing 16 channels makes things a lot better!
- Next step is to understand if peak finding works properly (it seems it does) + studying the light yield while playing with more sources
- NOTE: data was taken in office where it is ~30 degrees during the day...



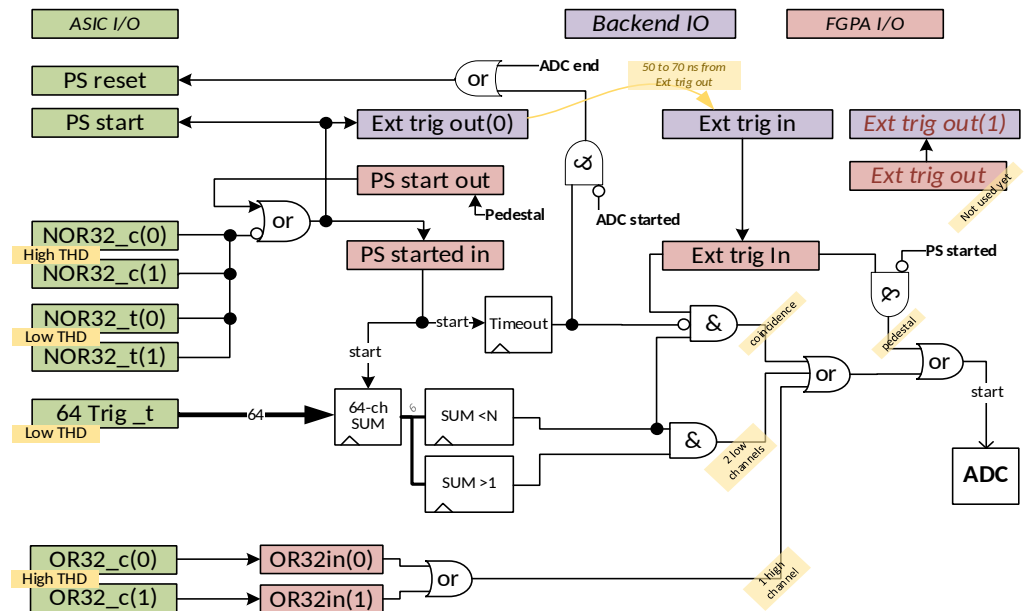
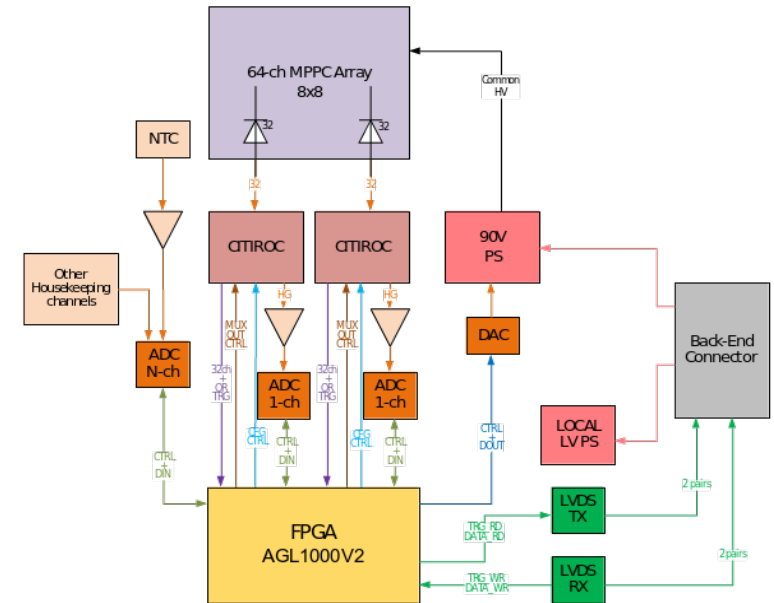
WP1: Detector Modules

- Design Peltier connector to SiPM
- Wrap scintillators first module
- Finalize plastic grid design
- Order next plastic grids
- Study coupling SiPM to scintillator
- Build first test setup with working readout
- Build module with POLAR-2 scintillators
- Finalize socket design
- Do temperature tests SiPMs + scintillators



WP2: Front-End Electronics

- Study noise from time_trigger (ASIC)
- Finish decoding software
- Finalize requirements documentation
- Design FEE with IGLOO
- Perform GOWIN radiation test at UNIGE
- FPGA selection
- Select other components (DAC, ADC...)
- Order 8x8 SiPM arrays
- Take data with SiPM + Peltier
- Produce first readout logic for test beam (with BabyMIND with updated FW)



WP3: Back-End Electronics

- TDR
- Component selection (export / space qualification etc.)
- Fibre communication protocol

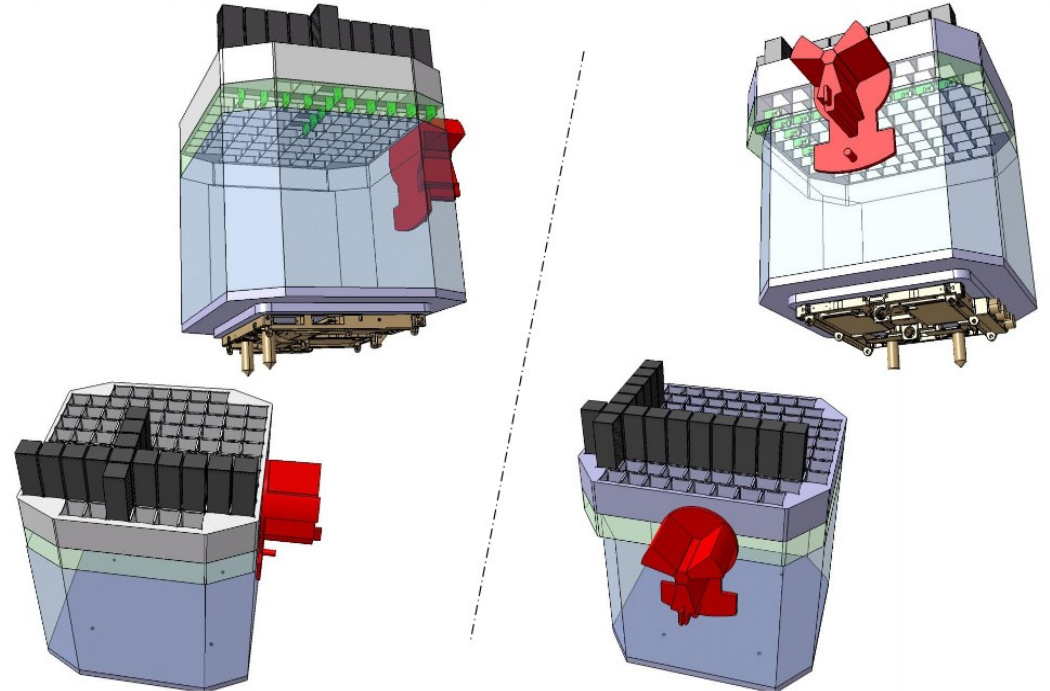
WP4 (Low Voltage Power Supply)

- TDR
- Component Selection

WP5 (Mechanics and Integration)

- Finalize dimensions with CSU
- Aluminium grid design
- CFRP design
- Thermal simulations
- Shock simulations

Square design (within 600x600mm) / *"Mushroom" design (off centered)*



WP6 (Qualification Tests)

- Nothing for now...

WP7 (Acceptance Tests)

- Nothing for now...

WP8 (POSS)

- Receive Communication protocol CSU
- Order first components or testing
- Receive hardware and software interfaces from CSU

WP9 (Spectrometers)

For MPE

- Study compatibility high-Z scintillators with Babymind board
- Test light yield, data with other source, temperature etc. etc.
- Order first scintillators (MPE)
- Develop simulations (optical)

For IHEP

- Write implementation plan for GeCAM detectors into POLAR-2
- Simulate spectrometers in POLAR-2 simulations setup