

BWEC status report

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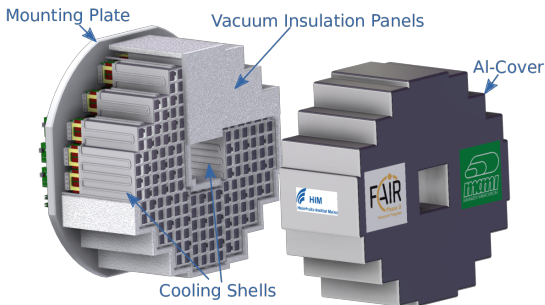


PANDA Meeting, October 2020 (online)

Outline

- ▶ Update on submodule components
- ▶ Timelines

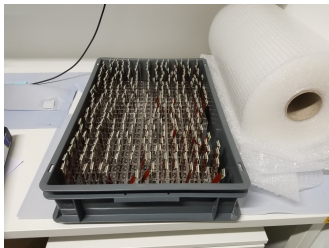
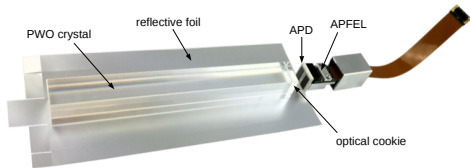
Endcap EMC for Phase 0



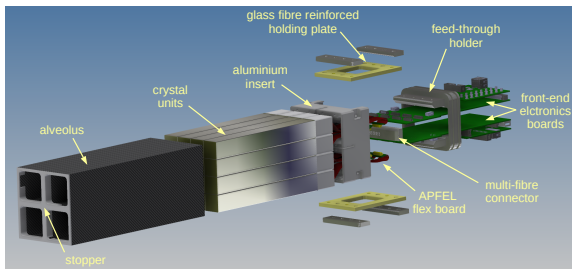
- ▶ 640 crystals
- ▶ only 4×4 submodules
- ▶ 48 submodules (16 equipped with 8 crystals)
- ▶ almost all components delivered
- ▶ start of mounting probably in December/January

Crystal unit components

- ▶ Crystals ✓
- ▶ reflective foils ✓
- ▶ APD plastic case ✓
- ▶ optical cookies ✓
- ▶ APFEL Al capsules ✓
- ▶ APD ✓
- ▶ APFEL boards ~✓
 - ▶ assembled and tested at GSI
 - ▶ 600 out of 804 are usable: 25% loss rate (15% assembling + 10% ?)
 - ▶ second series production in the process



Submodule components



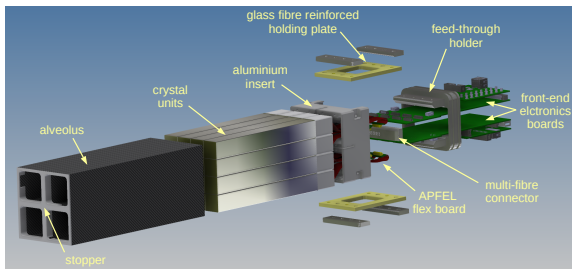
Alveoli

- ▶ Various technical issues during the summer
- ▶ In total 76 produced: 16 rejected
- ▶ 60 available – 48 needed for phase 0
- ▶ Continuing production also for spares
- ▶ Aim: ~20 spares also for PANDA

Holding components

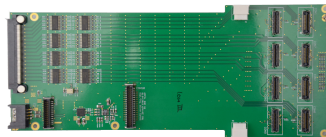
- ▶ Inserts ✓
- ▶ Glass-fibre holders ✓
- ▶ Feed-through holders ✓

Submodule components

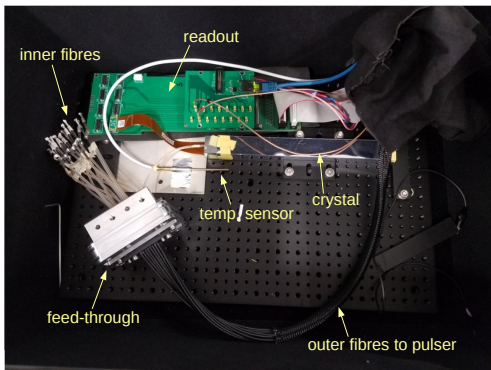
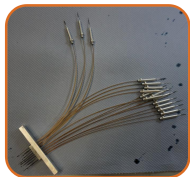


Front-end electronic boards

- ▶ Driver boards ✓ (to be tested)
- ▶ HV boards
 - ▶ yet to be tested
 - ▶ series production by the end of the year
 - ▶ not needed for mounting the submodules

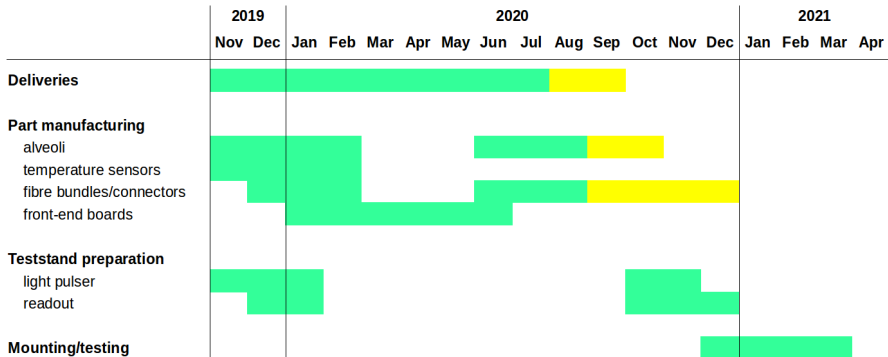


Light fibre connectors/bundles



- ▶ Outsourced to an external company
- ▶ Full order in preparation
- ▶ First sample tested for
 - ▶ light throughput
 - ▶ cross talk
- ▶ Delivery maybe end of the year

Submodule production timeline



Summary

- ▶ Almost all components for submodule mounting available
- ▶ Missing: optical fibres for test light pulses
- ▶ Mounting delayed to end 2020/beginning 2021

Some good news...

Oliver got his PhD...



congratulations!

