



FOOT calorimeter

Status Report

Crystals
SiPMs
Readout
DAQ
Mechanics
Plans

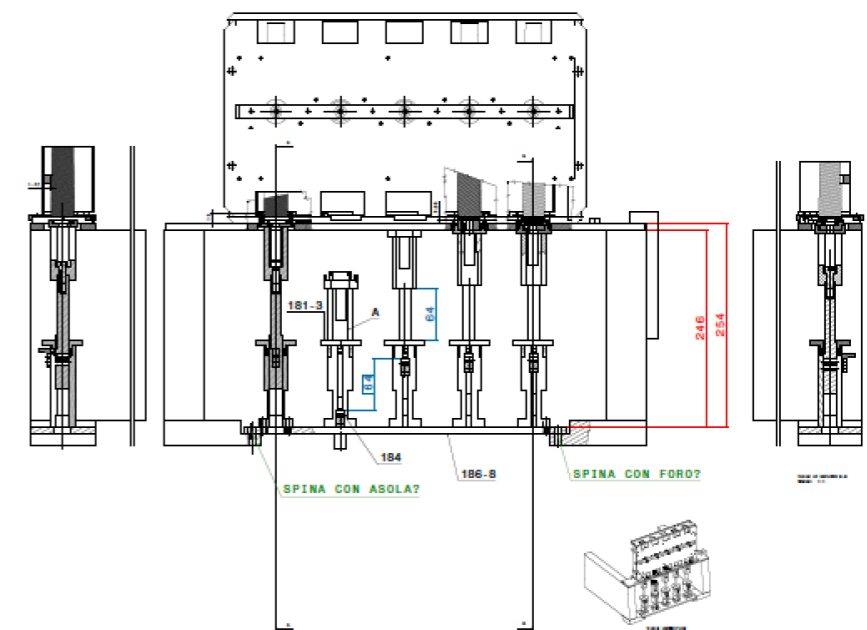
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BGO crystals

- Crystal size mapping: completed
- Crystal painting vs. wrapping, coupling
 - TYVEK wrapping
 - SiPM coupling: tested in Feb2020
- 4 Crystals coupled to thin slice of fast scintillator in front
- **Crystals wrapping and coupling at CERN**
- **Holder assembly completed, ready to start (depending on COVID-19 boundary conditions)**





SiPM tiles: to do list

- Order for production and packaging placed
- Silicon production successfully completed
- **Tiles: 45 delivered November 2021, 125 in January, 160 in February**

Front-end boards

- received

Module holders

- received



Power supply distribution: to do list

- System designed (4 switch boards + 32 supply boards)
- **Board1 (32 pieces): order placed – delivery by end 2021**
- **Board2 (4 pieces): RDA placed, order will follow**
- **Cables:**

Readout: 5m length, order placed

Power supply: stage 3 (from Board1 to FE-board), order placed

Power supply: stage 1 (crate to Board2): will be built in-house

order for material placed via CERN, delivery April 2022

Power supply: stage 2 (Board2 to Board1): RDA placed



SiPM readout: to do list

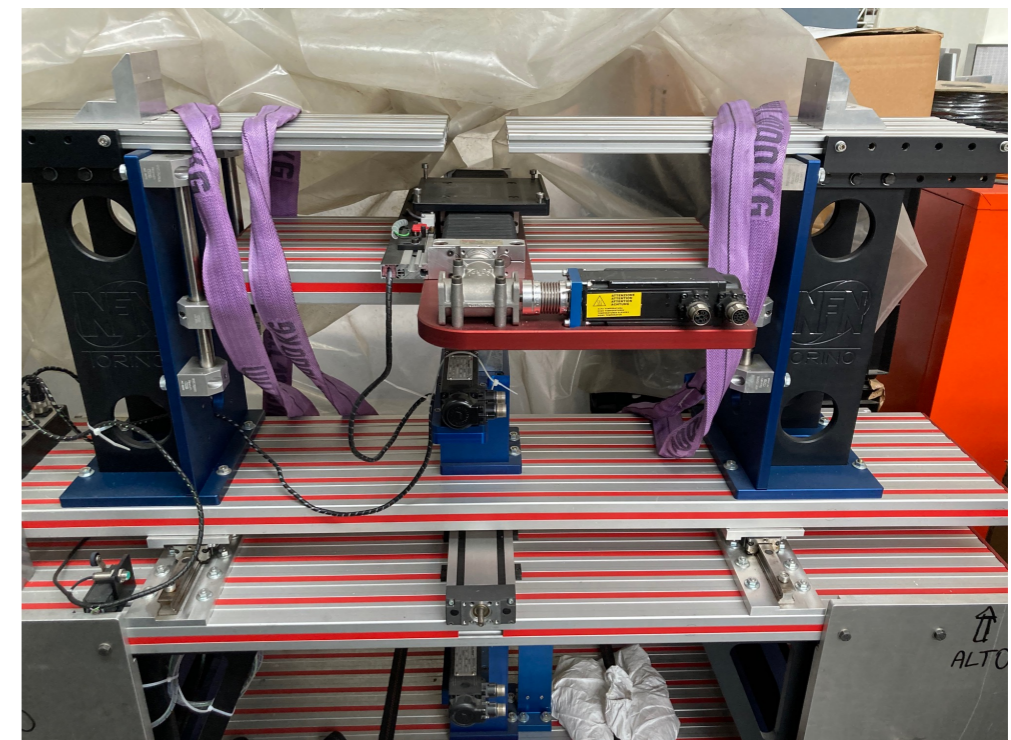
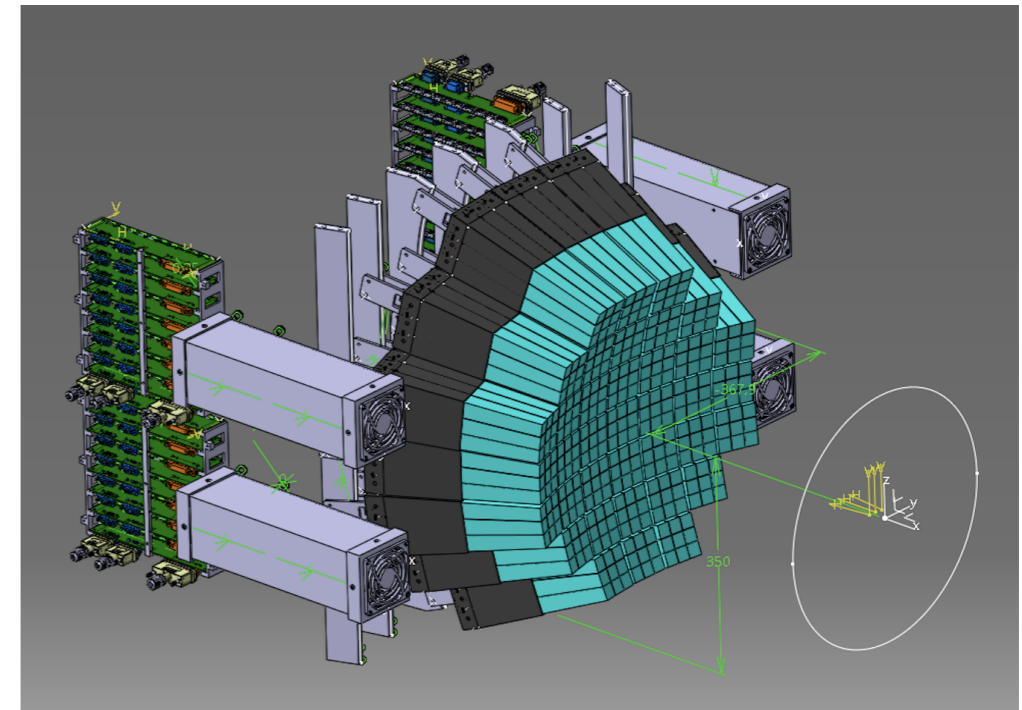
- Power supplies (CAEN SY5527 + supply boards) - received
- Readout: from CAEN V1742 to Wavedream – received

Temperature correction

- **System designed**
- **Prototype completed**
- **Orders placed**

Mechanics

- **System design completed**
 - **Components: RDAs placed**
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- **Mechanical structure for calibration**
 - **x/y displacement remote control**





Overview

- **Design completed**
- **Procurement is ongoing (all orders placed), construction will start as soon as components are delivered**
- **Open issues**

Access to CERN (COVID-19 new variant)

Temperature calibration

Calibration Procedure @ CNAO (beam availability?)