

Update on the MWPCs status

M. Alexeev & colleagues

Università di Torino & INFN Torino



MWPC @ Dry Run (update 09.12.20)

Experts:

- The expert, most probably, ~~will be able to come for a couple of days to power the FEs~~
- No presence is foreseen during the DryRun as on-call/repair
- Simple repairs/checks could be done by the experts on-site.

Was not possible



Goals:

- ~~We would most probably introduce only a small part of the new elements (part of the new cooling)~~
- Running the available FEs and collect the failure statistics and noise figures

HV:

- We will try to switch all ON by our expert to check the power supplies

The main ongoing activities 20.09.20

Prototype MWPC chamber with the iFTDC based readout

✓ Digital FE preparation

Analog FE preparation

✓ PS procurement

Infrastructure preparation

DAQ integration

Monitoring software

Cooling for the standard chambers

Concept validation

Elements preparation

Installation on the MWPC

Feedback loop control

Monitoring of the performance

Pulser for the rates tests

Concept validation

Installation

Monitoring

The main ongoing activities 09.12.20

Prototype MWPC chamber with the iFTDC based readout

- ✓ Digital FE preparation
- ✓ Analog FE preparation
 - Need calibration
- ✓ PS procurement
 - Delivery postponed
- Infrastructure preparation
- DAQ integration
- Monitoring software

Cooling for the standard chambers

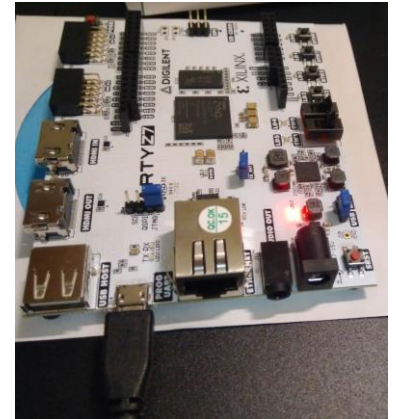
- ✓ Concept validation
 - The vortex tubes were tested
- ✓ Elements preparation
- Installation on the MWPC
- Feedback loop control
- Monitoring of the performance

Pulser for the rates tests

- ✓ Concept validation
- Installation
- Monitoring

MWPC upgrade (update 09.12.20)

- ❖ The analog cards are since few days in Torino
- ❖ We plan to start the calibration of the cards at latest in 01.2021
- ❖ The preparation of the pulser is ongoing after a break due to the Covid restrictions
- ❖ The working group has finally acquired two new members that were restricted in participation in October/November period



We will need to organize dedicated or in parallel with other groups test of the RO and DAQ integration of the new equipment prior to the 2021 commissioning period