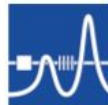


Hardware

Christof Motzko
on behalf of the Luminosity Detector Group

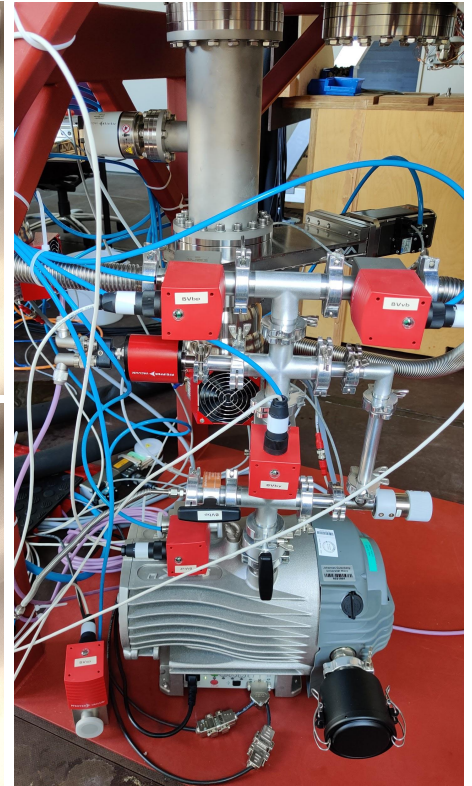
Helmholtz-Institut Mainz
Johannes Gutenberg-Universität Mainz

PANDA Collaboration Meeting
June 22, 2020



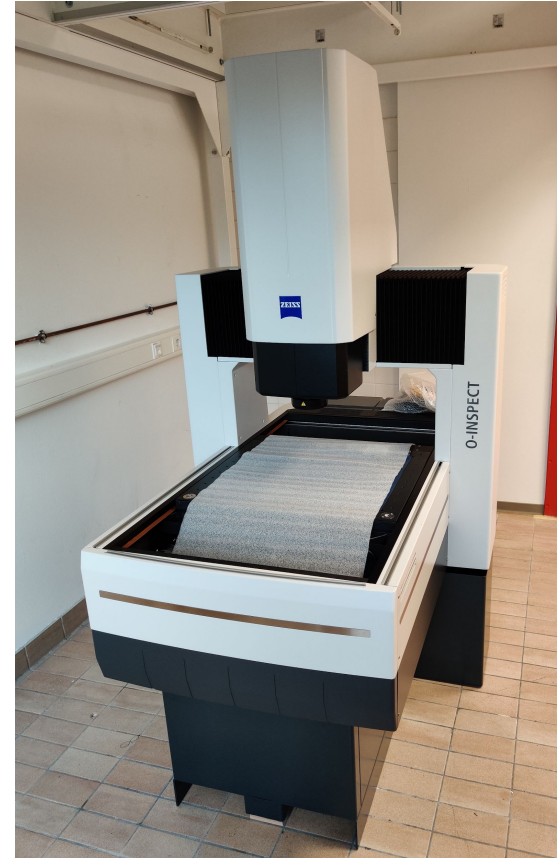
Vacuum System

- All components can be controlled remotely
- Use of a PLC for control
- First working system ready
- Implemented:
 - Manual control of all components with the touch screen(valves, pumps)
 - Automatic readout of the gauges
 - Start script for pre-vacuum
 - Automatic emergency off
- Have to be implemented:
 - Profinet
 - Connection to EPICS
 - Further automation



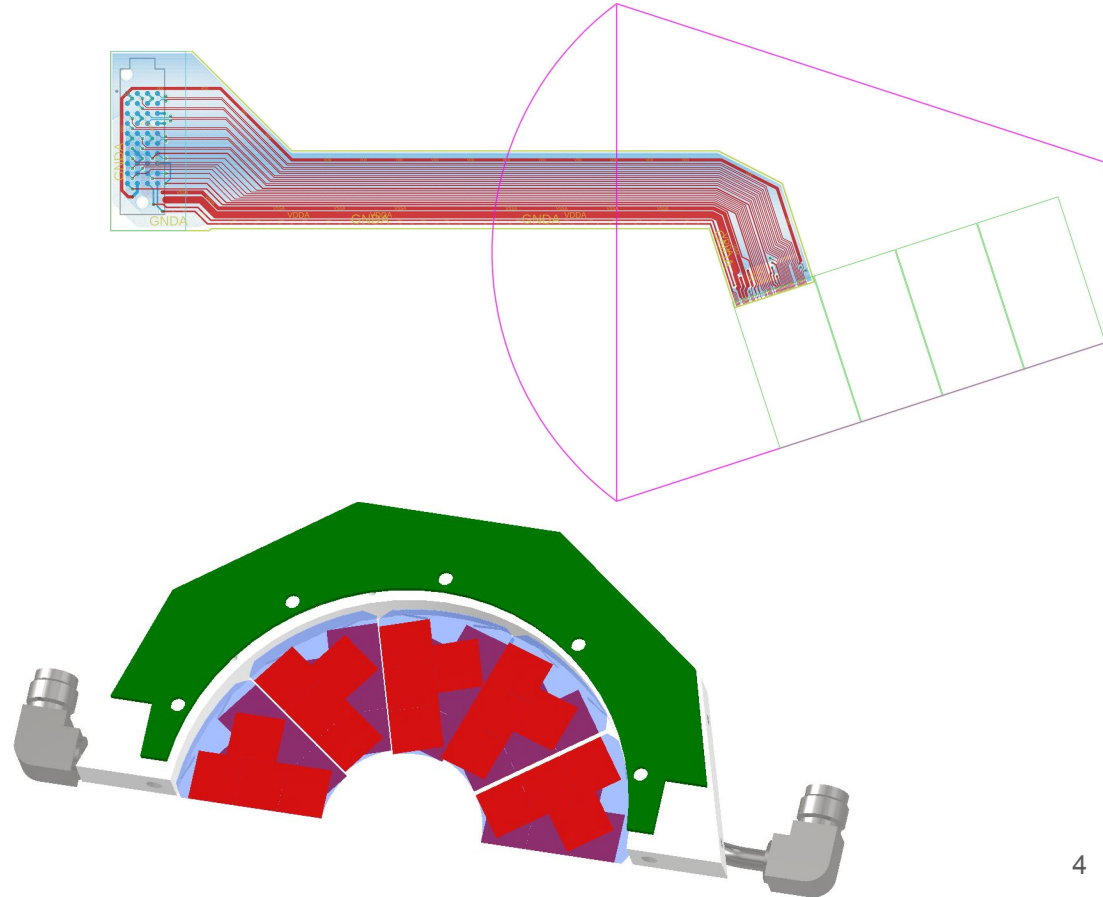
CMM

- Zeiss O-INSPECT 543
 - Resolution: $>1.9 \mu\text{m}$
 - Max. dimensions: $500 \times 400 \times 300 \text{ mm}^3$
 - 3D tactile measurement
 - 2D optical measurement
- Delivered mid February
- Installation one week later
- Ready to use since February
- Training cancelled due to Corona
- No new date for the training have been agreed so far
- Construction of the clean room started (frame is constructed)
- Further construction not possible due to Corona



Electronics

- Aluflex
 - New design of the cables
 - One cable per sensor
 - Similar design as before
 - Produced by LTU in Ukraine
 - Delivery in August
- Half plane
 - supply electronics (voltage regulators, LVDS repeater)
 - Connection for the outside cables



Conclusion

- Control of the vacuum system changed to PLC
- CMM delivered and ready for use, but training postponed
- Clean room not yet ready
- Development of the supply electronic pcb ongoing