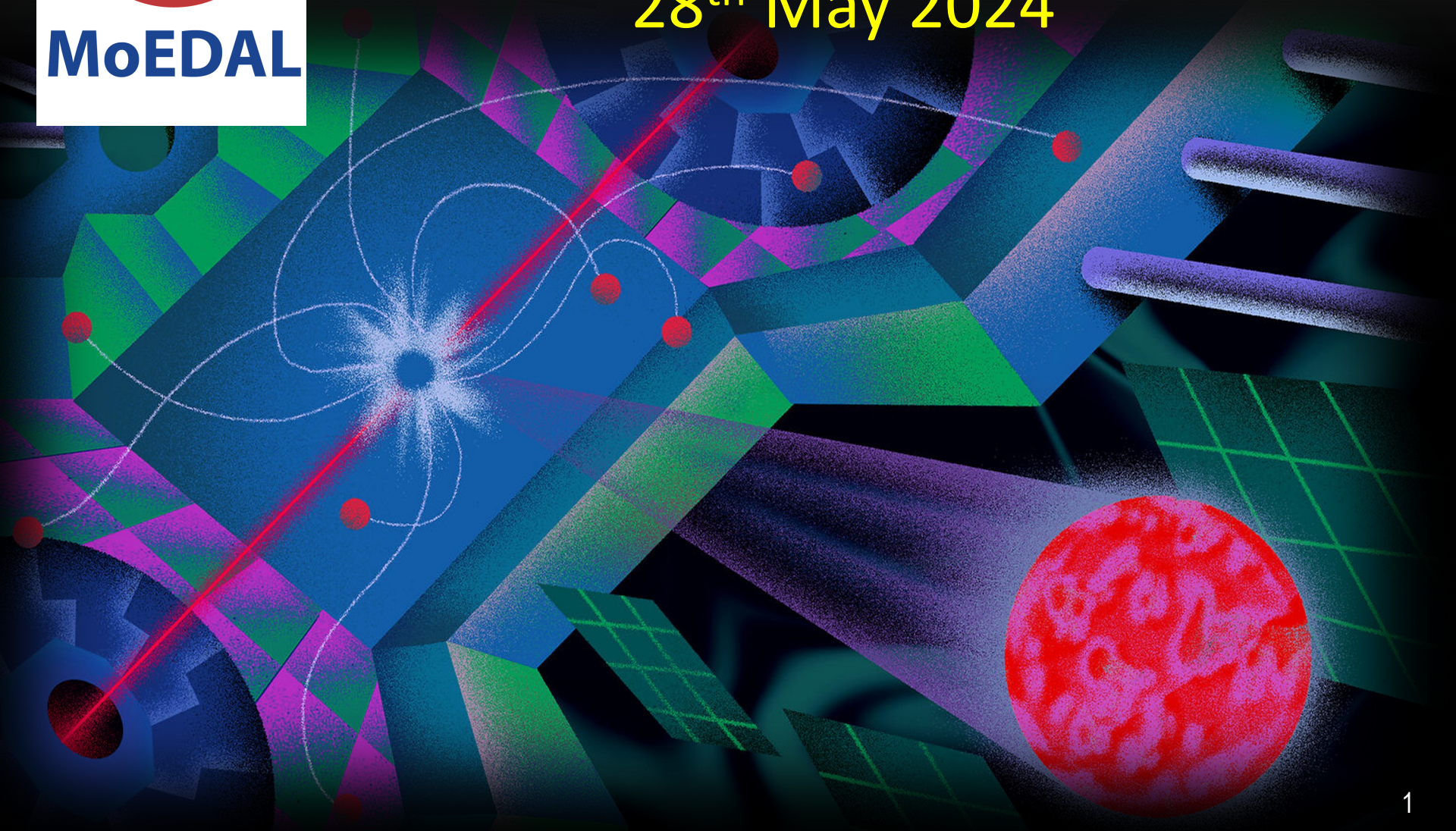


MoEDAL-MAPP

Report to LHCC Referees

28th May 2024





AGENDA

MoEDAL

- *MoEDAL*

- *First Run-3 NTD data*

- *MAPP-1*

- *Frontend electronics progress*

- *Installation in June 10th TS week*

- *Final installation in YETS 2024*



MoEDAL

MAPP Electronic Readout Design is Completed – however FE electronics fabrication is delayed

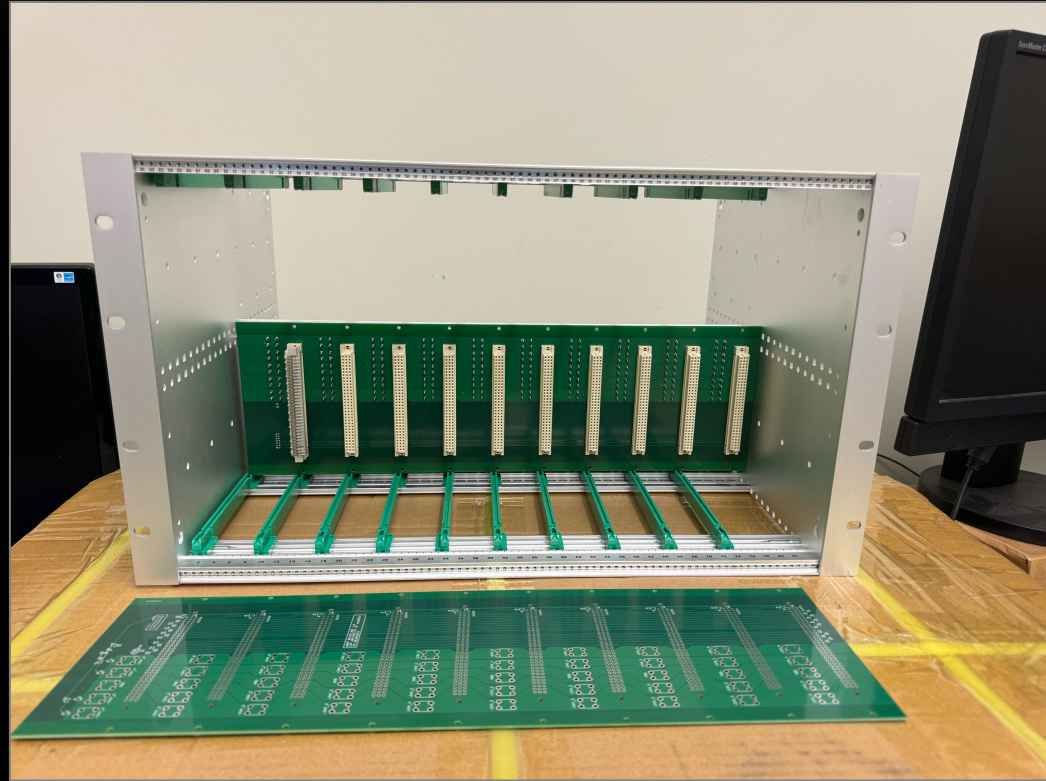
- *IN PREVIOUS LHCC REPORT – “Our electronics engineer (Paul Davis) reports health issues that have been developing over months, resulting in delays with our FE electronics fabrication. He is being treated and we are expecting him to be contributing again in 2024. However, we are now monitoring the situation carefully.”*
- *PROGRESS SINCE: The engineer is now working and has been assigned 100% to the completion the MoEDAL-MAPP electronics, until further notice.*



MoEDAL

Progress on Frontend Electronics Since Last Report (1)

- *As can be seen on the right:*
- *The front-end crate was assembled*
- *The back-plane for the front-end crate was produced, delivered and tested.*



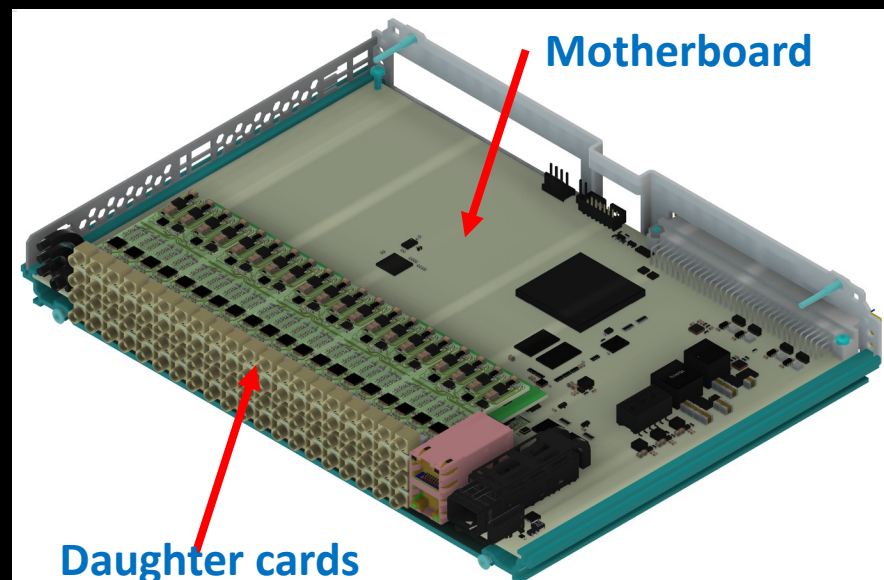


Progress on Frontend Electronics

MoEDAL

Since Last Report (2)

- *Work is advanced enough on the submission of the FE electronics board to allow 3D CAD visualization of one FE board*
- *The board contains 64 channels of readout. The crate holds 640 channels of FE readout.*
- *2 out of the 3 boards comprising the FE system have been submitted and are due back on May 31st*
- *3rd board to be submitted shortly*
 - *Boards will be populated with the majority of components by the Board Manufacturers*

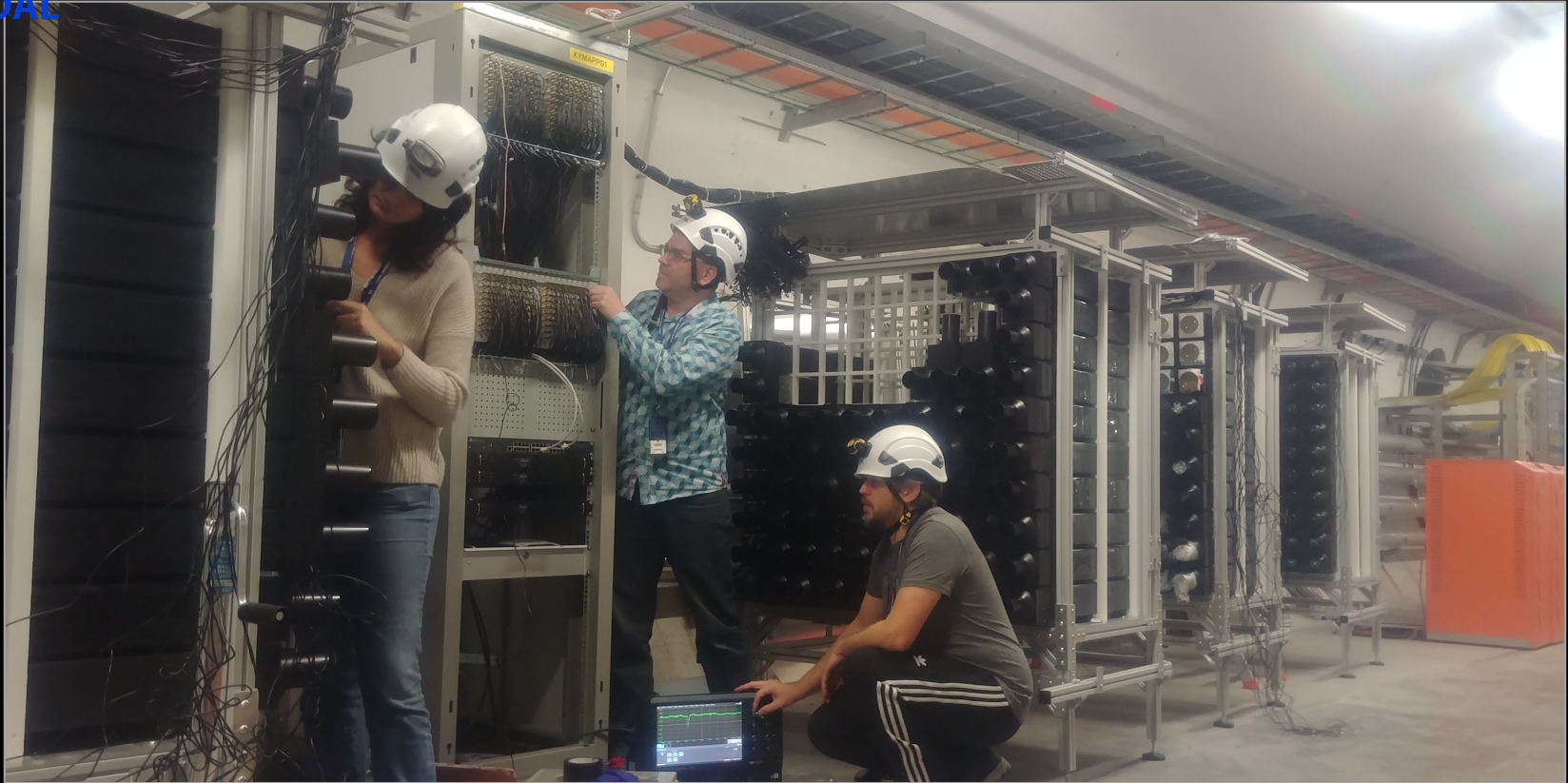


FRONTEND BOARD



MAPP-1 Installation to Date

MoEDAL



- *The MoEDAL-MAPP team will continue to install MAPP-1 during the June 10th Technical Stop.*
- *The remaining scintillator bars to be instrumented with PMT + base*
- *Available Frontend Electronics will be installed.*



MoEDAL

Remaining MAPP Installation Schedule Overview YETS-2024

- *December 2nd → 15th 2024 complete the installation of readout electronics*
 - *First tests of complete readout chain using cosmics and start tests of the FE electronics –continue with testing of MAPP-1 FE readout throughout winter.*
- *January 7th to February 8th 2025 –*
 - *Connection to LHC timing (fibre is in place)*
 - *Install calibration electronics*
 - *Install temperature sensor system*
- *February 9th to start of data Taking:*
 - *Test of calibration system*
 - *Test of complete detector + complete readout chain for all channels using cosmics.*