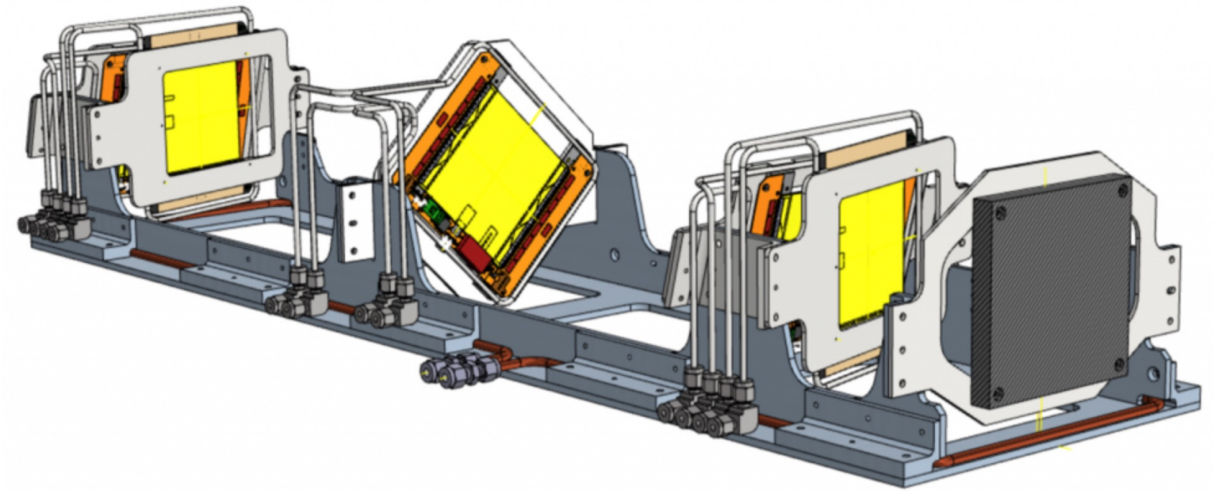


MUonE group update



E. Bottalico
Muon Group Biweekly
3 Nov 2025

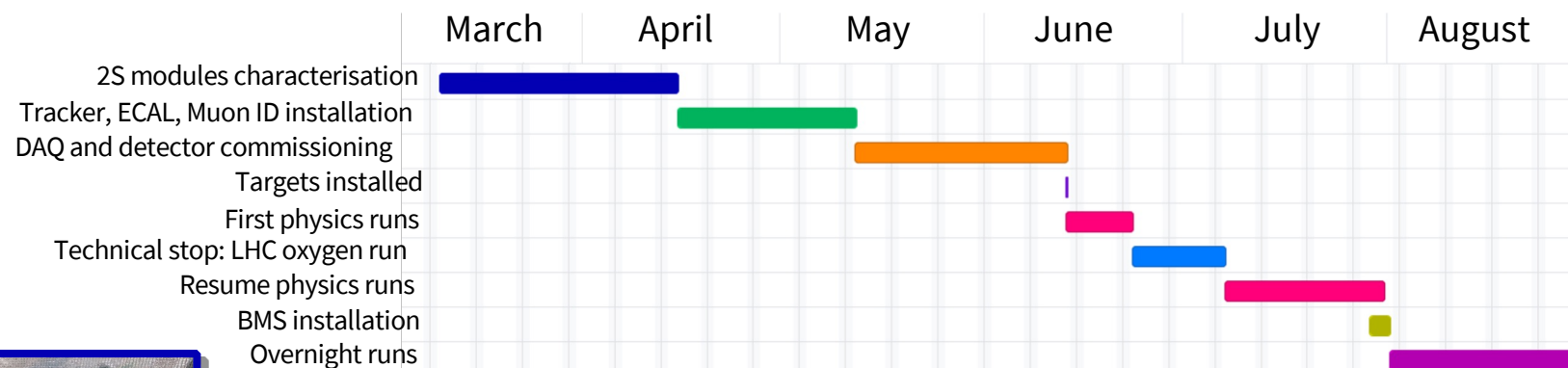


LEVERHULME
TRUST

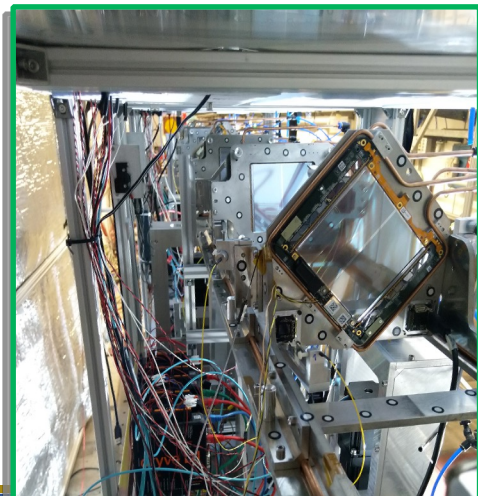
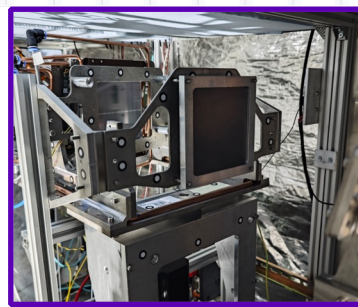
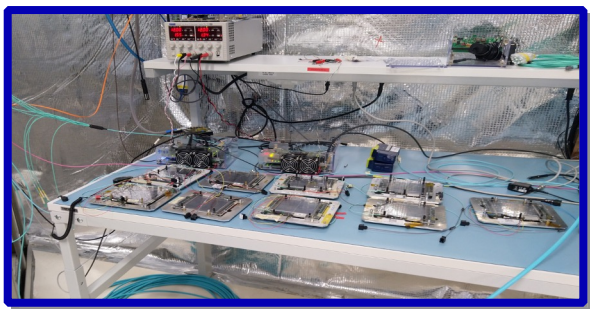
UNIVERSITY OF
LIVERPOOL



MUonE Phase 1 update

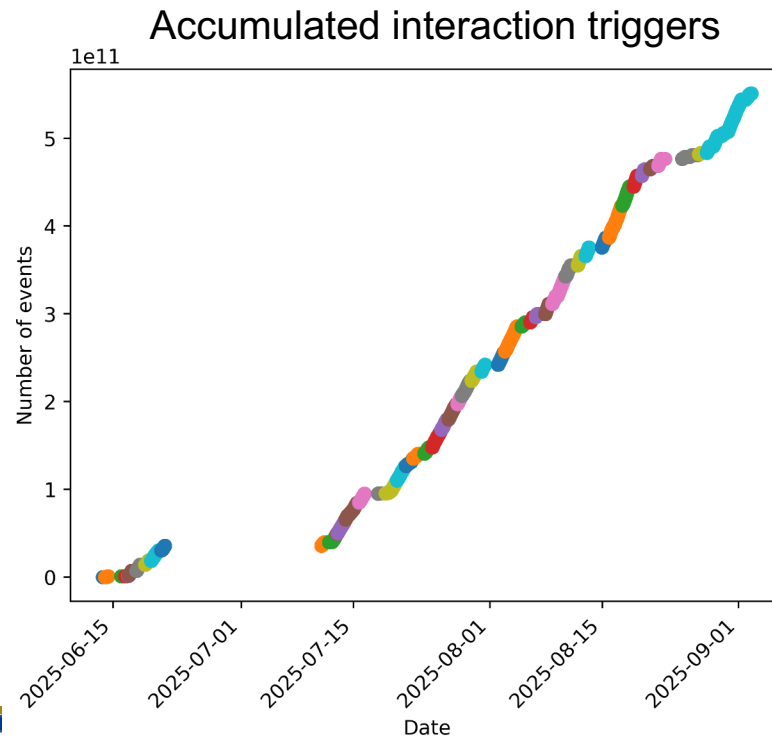
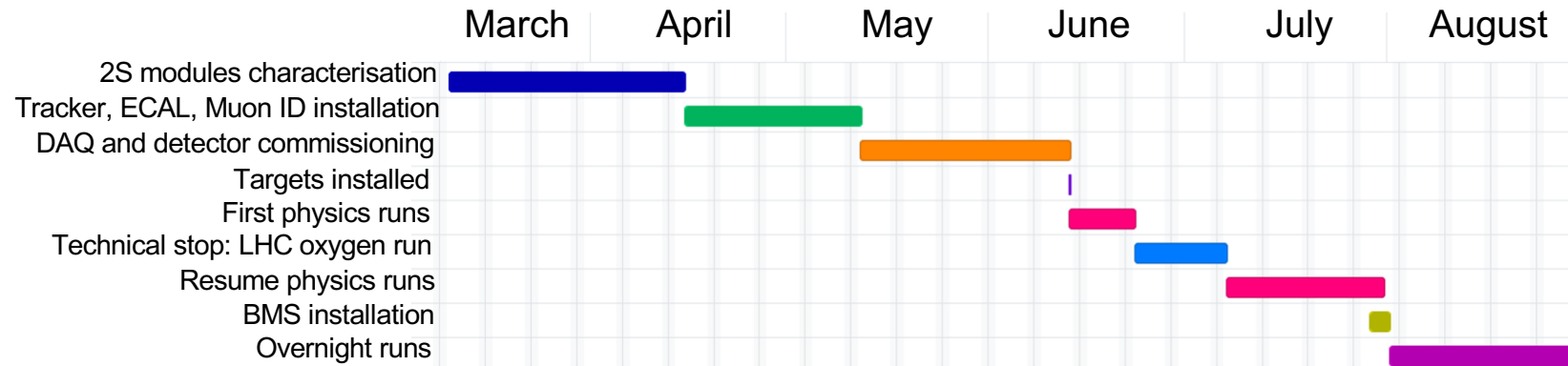


Riccardo's courtesy





MUonE Phase 1 update



more than 5×10^{11}
interaction triggers recorded!

Riccardo's courtesy



MUonE Phase 1 update

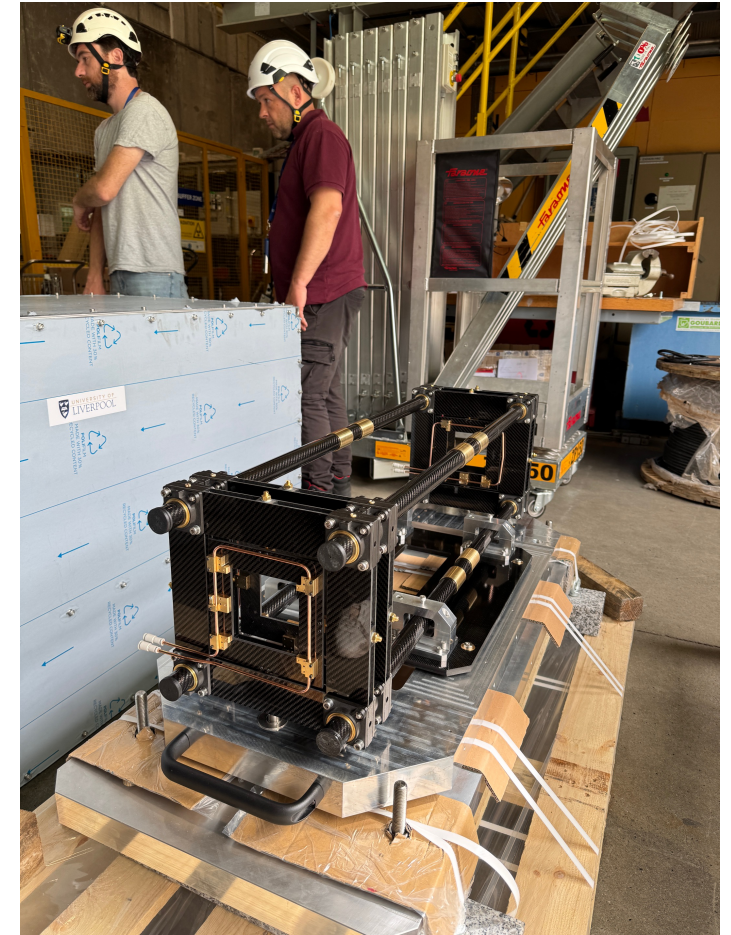
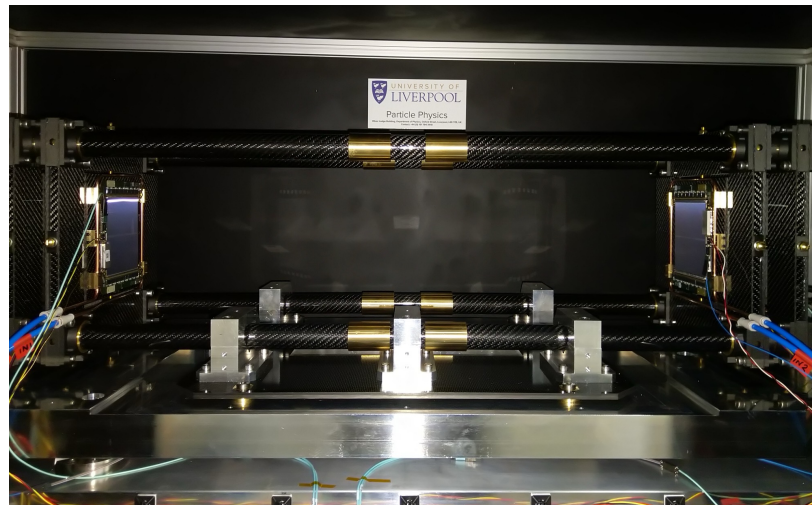
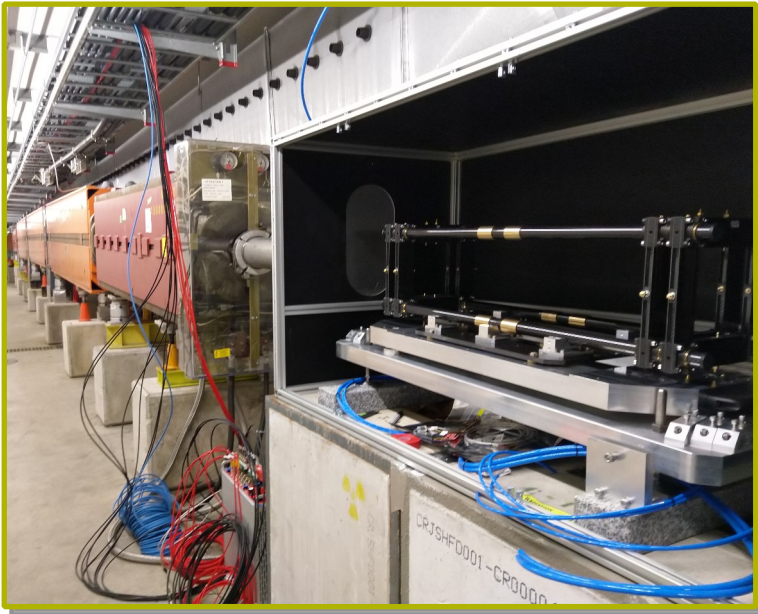


- Big thank to all the people who made the Phase 1 data collection possible.

The Liverpool contribution was fundamental for the success of the data taking:

- **Saskia** made the first version of the online **DQM**;
- **Giorgia** assembled and tested the 2S module;
- **Clement** helped including the new calo and MuonID in the reconstruction;
- **Riccardo** did the run coordinator;
- **All** - a lot of shifts taken!

- The BMS has been installed during the second half of July.
- Thanks Dave, Alan, Kieran, John and the workshop!

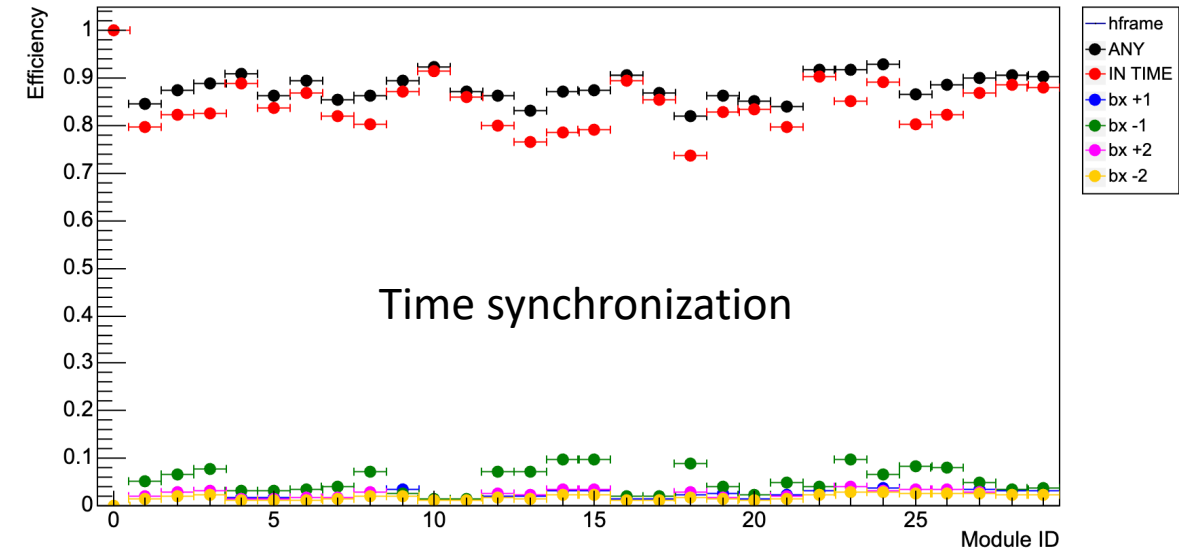
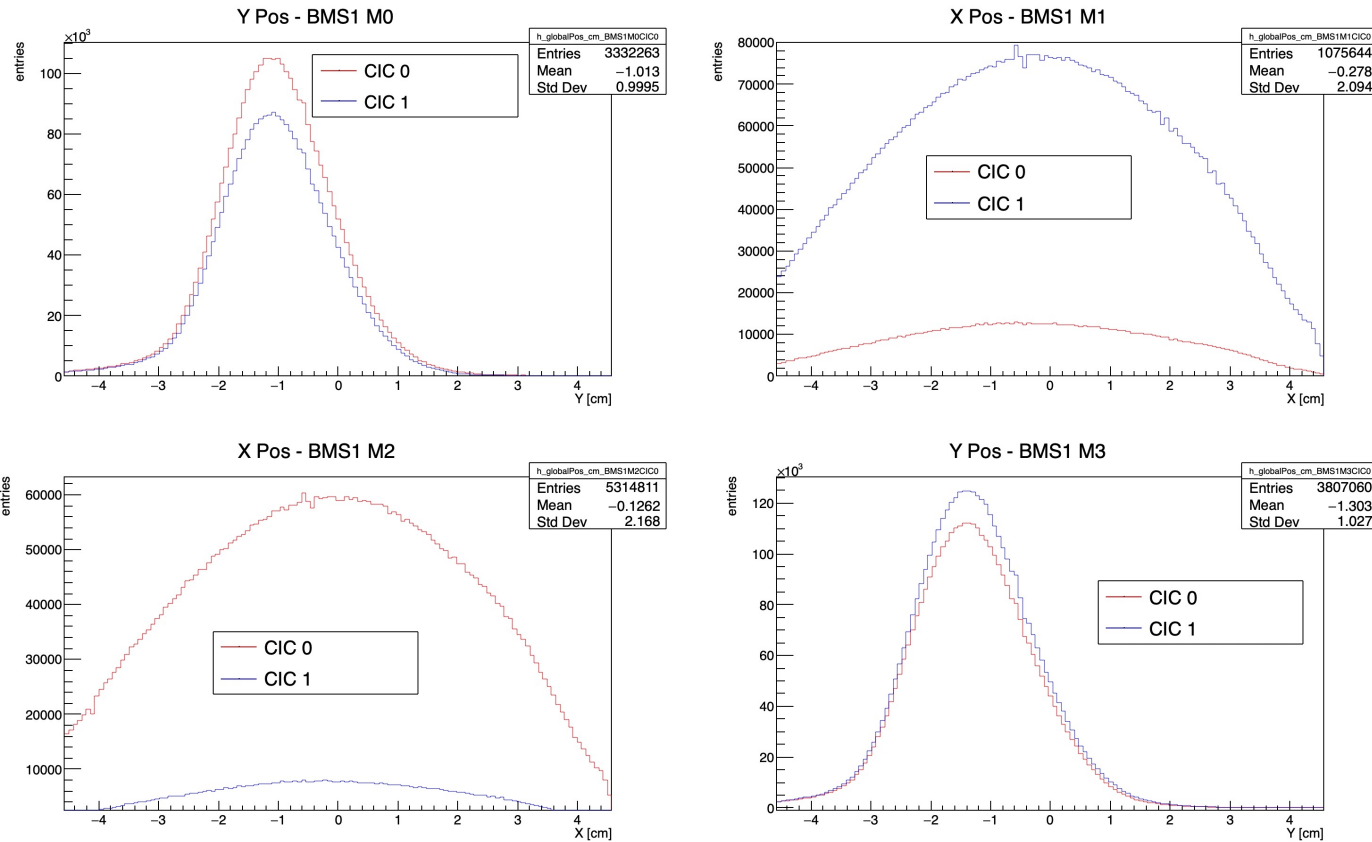




BMS: First Beam!



- The BMS has been aligned with the beam, included in the DAQ and synchronized with the trackers and calorimeter.





Tracker performance paper



- The work on the tracker performance paper has been started.
- Many people from our group have been involved, we worked on several expect as simulation (Giorgia), alignment and efficiency (Riccardo, Clement)
- We will start meeting regularly soon to make progress on this.



New members



- Since the last Muon Group update 3 new members joined the MUonE

Liverpool group:



Tom



Estifa'a



Alan



Phase 1 data analysis



- Work ongoing on detector performance:
 - Developing other alignment procedure (Clement, Riccardo);
 - Improving simulation of the silicon sensors (Giorgia, Elia);
 - Checking the stability of the efficiency vs runs (Estifa'a);
 - Studying the Muon Filter performance (Cedric).
- Optimization of disk space of the reconstruction output (Katie, Clement);
- Multi-target simulation (Niels);
- Background study from simulation (Katie)
- Offline DQM and online DB (Saskia)



Thanks