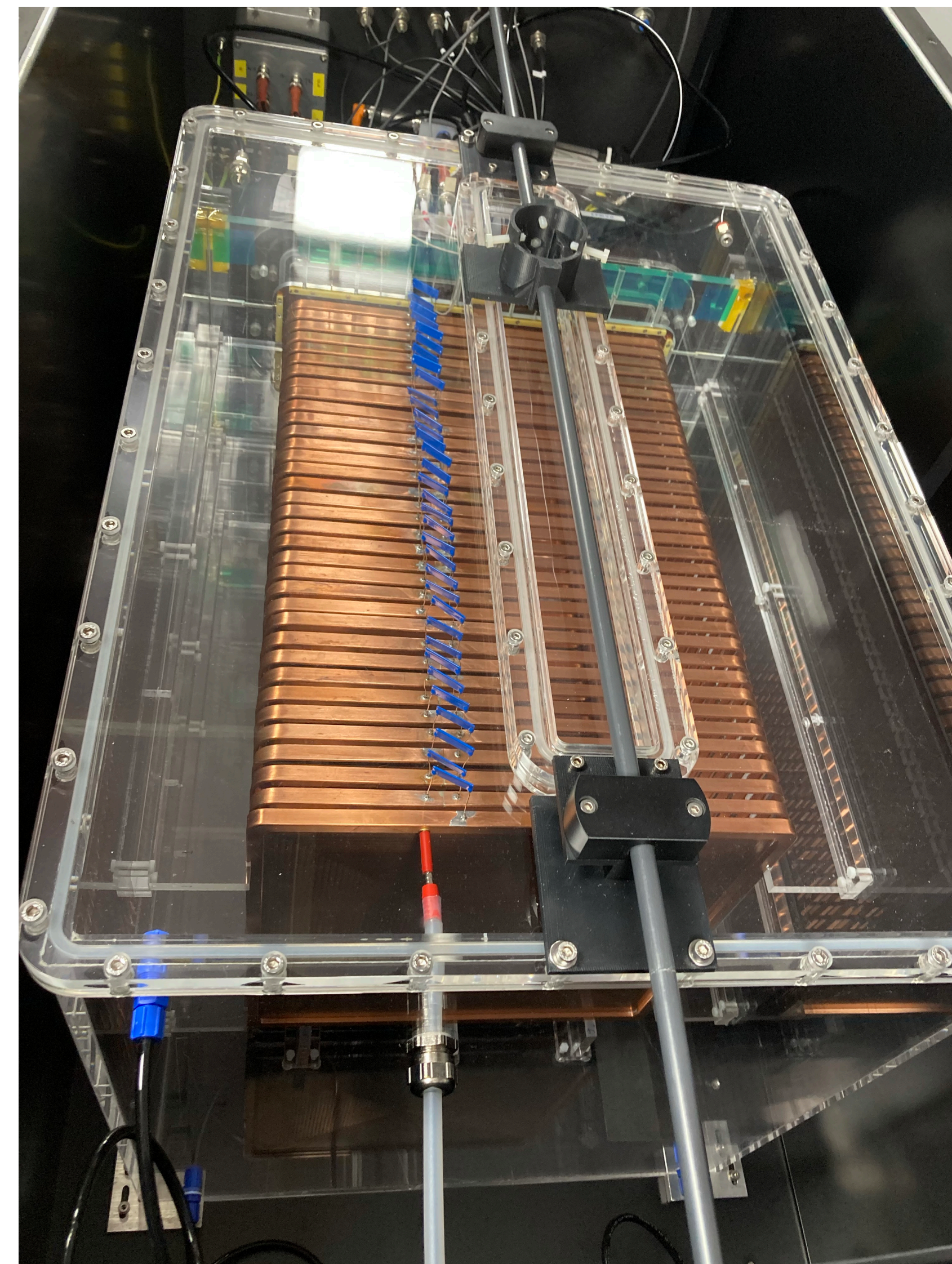


RUN 4 status & summary

Stefano Piacentini

General Meeting

08/02/2024



RUN 4 - Summary

Gennaio

2024

LUNEDÌ	MARTEDÌ	MERCOLEDÌ	GIOVEDÌ	VENERDÌ	SABATO	DOMENICA
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
Background						
22	23	24	25	26	27	28
Bkg	Stability	Background				
29	30	31	1	2	3	4
Background						



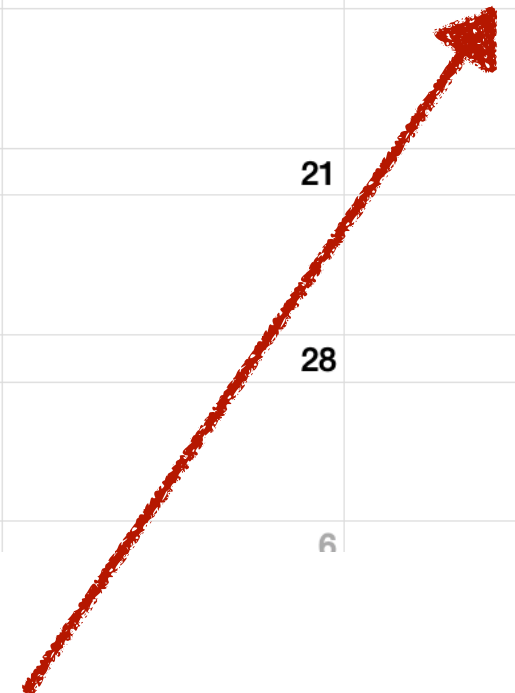
Technical operation on the gas line:

No appreciable variation on the LY observed, data taking restored after 1 day

Febbraio

2024

LUNEDÌ	MARTEDÌ	MERCOLEDÌ	GIOVEDÌ	VENERDÌ	SABATO	DOMENICA
29	30	31	1	2	3	4
			Background		Stability - 4 l/h	
5	6	7	8	9	10	11
Stability - 5 l/h	Background		Stability - recovery bottle full			
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	1	2	3
4	5	6	7	8	9	10



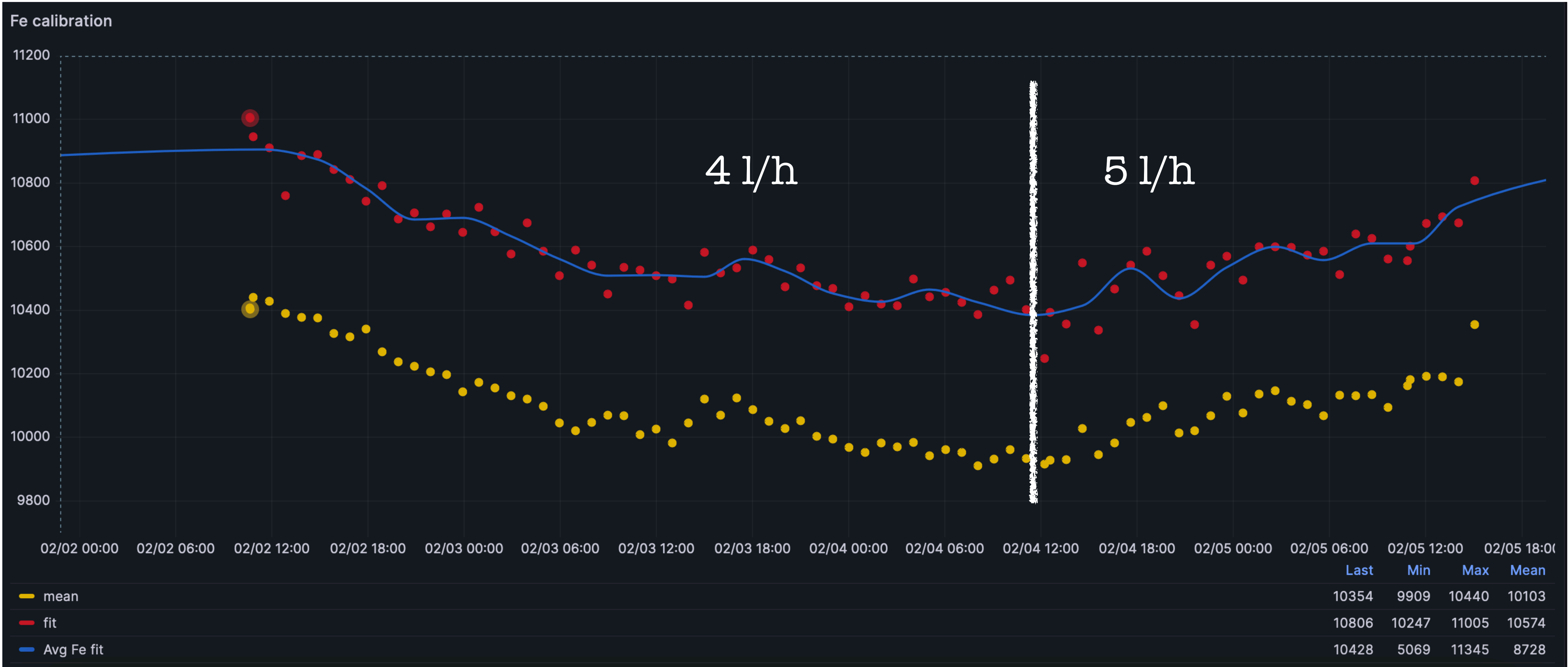
Recovery bottle full:

Background data taking stopped. Testing gas deterioration @ 0 l/h of both fresh and recirculation

2 Recovery bottle substituted today.

RUN 4 - Summary [Operation @ 4 l/h]

- Operation @ 4 l/h tested for 48 h.
- LY recovered by operating @ 5 l/h for 24 h.



RUN4 end: LIME sensitivity

- New analysis on the **LIME sensitivity** will be performed in the next days
 1. “Fast” result by using **optimistic assumption** on the detector performance (angular resolution, NR threshold) → a **quick result of the best** we can possibly do
 2. If LIME will end up having a reasonable sensibility → more refined analysis with the **real performance** to:
 - A. Give us insights on the RUN4 lifetime
 - B. Preliminary sensitivity projections for the LIME underground campaign
 3. If the LIME sensibility will not be great → decide if stopping before the 15th of March and, before moving to the underground neutron measurement, plan to collect data in RUN4 configuration @ low GEM voltage