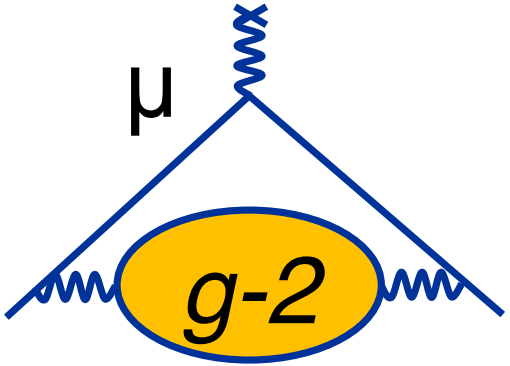
MUON G-2 UPDATE

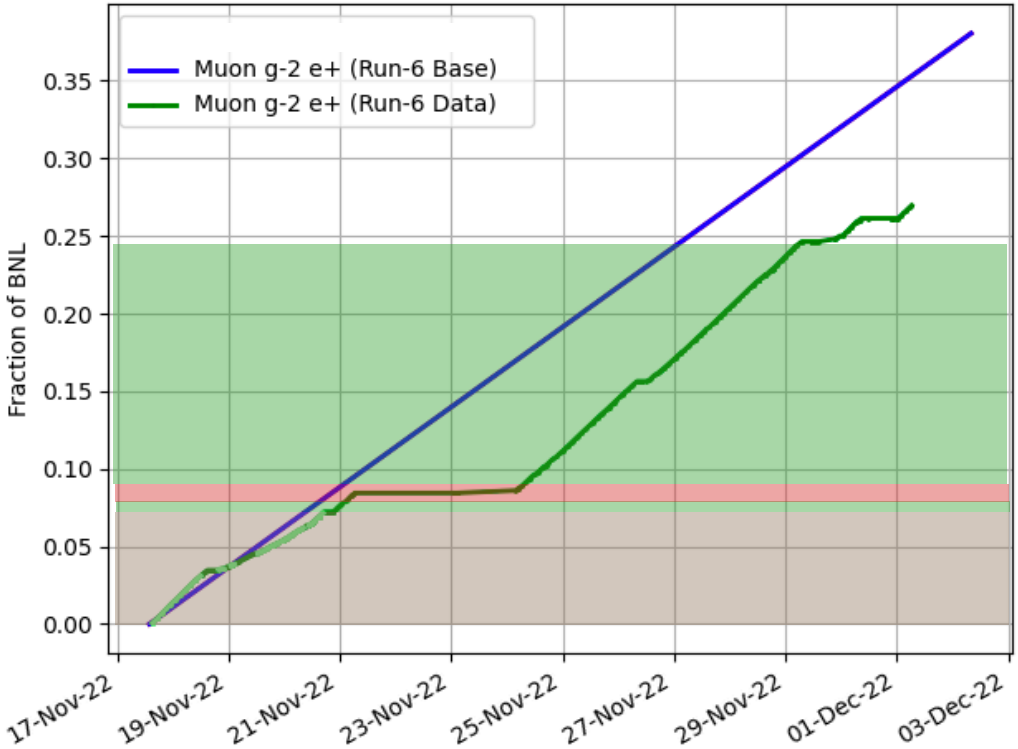


S. CORRODI (ANL)/M. SORBARA (INFN)/C.POLLY(FNAL)

Proton PMG/
All Experiments Meeting
12/01/2022

START OF G-2 RUN 6

The experiment was ready for beam: starting ~10/24



continue with physics data

muon storage rate is on the same level as last year, ~30% below our best times

physics data over the holidays!

~3 days downtime: next slide

9h run-6 physics data (11/20)

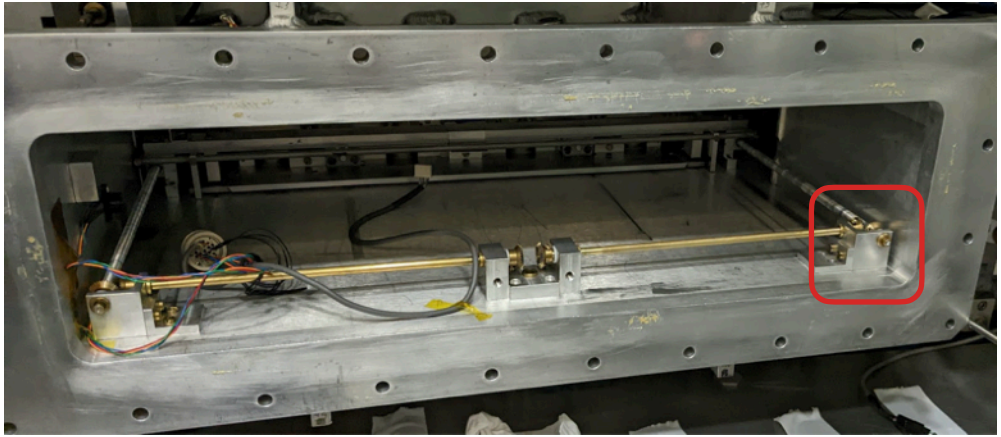
System tune up and calibration runs.

First beam to g-2: 11/17. Thanks!

3 DAYS OF DOWN TIME

Part 1)
- Leaking straw tracker causing the storage vacuum to degrade (close to ~$1x10^{-5}$ torr)
- locating the leaking tracker (RGA test): ~1 day, replaced the module ~1 day

Part 2)
- magnetic field mapper (trolley) got stuck during insertion into the ring
-> stuck rod/bearing fixed, required a magnet and vacuum cycle



DETAILS ON RUN-6 OPERATIONS

First year with a **single fully remote** shifter, we used to have 2 before
+1 local cryo operator

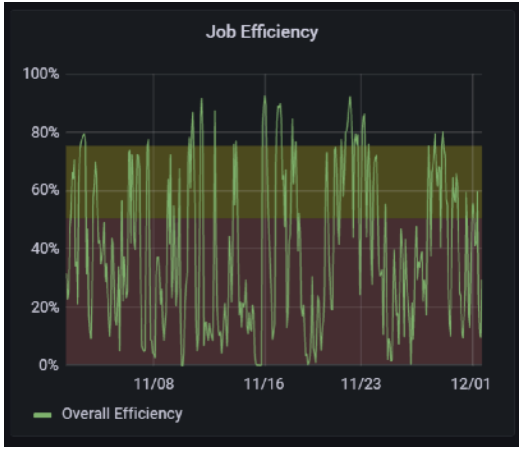
MCR-shifter communication: using Telzio, in coordination with other experiments
so far very good experience
since 11/17: 101 calls, 147min total

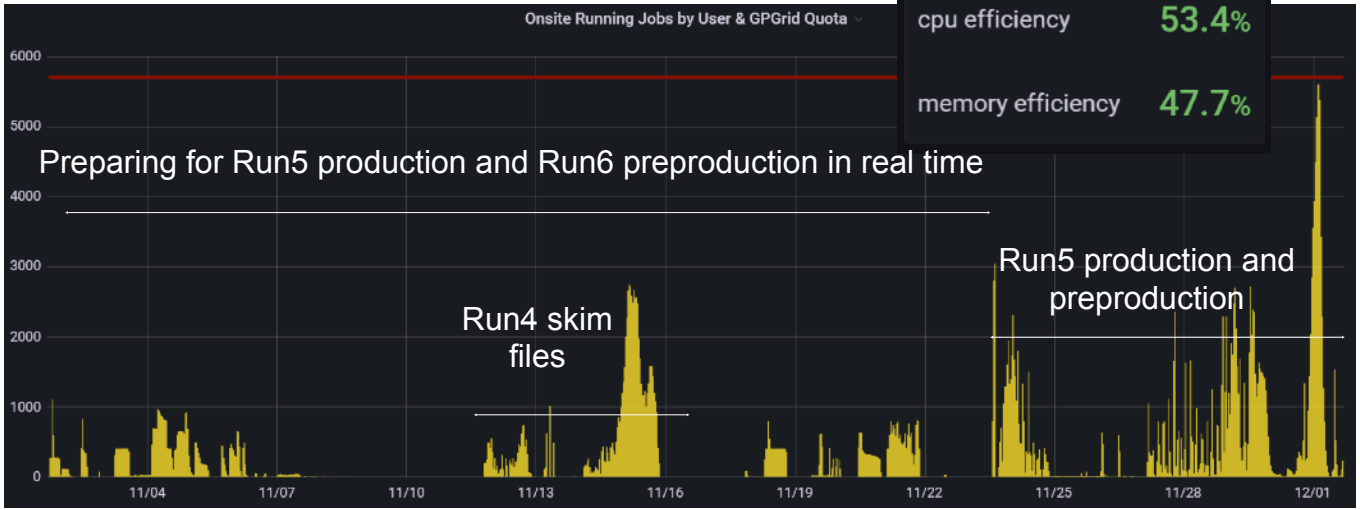
“Quasi-online” pre-production:
Developing and testing a scheme to run the pre-production of our data while the files are still staged in the write pool

Status of Offline Production

Total Jobs Run

753916





Batch Job Resource Efficiency

cpu efficiency	53.4%
memory efficiency	47.7%

- Run-4 full-production completed at 100%, we are producing skim files
- Run-5 production has started, pre-production is at 53%
- Managed to more than double our production speed with respect to last year
- New prestaging scheme in place to reduce impact for other experiments and improve speed for g-2