

Managed by Fermi Research Alliance, LLC for the U.S. Department of Energy Office of Science

Muon Campus Operation Report

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Friday 09:00 Operation Meeting

April 15, 2022

Activities for the Past Week (1)

Friday 04/08:

- Day: Commissioned M4 line in Mu2e mode: Run well up to bend H910: Problems with set & read-out of magnet H910
- Day: Noticed problems with D:Q927 power supply
- Provided beam to g-2 evening/owl shifts
- Weekend 04/09 and 04/10:
 - Provided beam to g-2 all weekend.
 - Noticed a 13% reduction in delivered muons compared to before installing V907 windows



Activities for the Past Week (2)

Monday 04/11:

- Improved tuning in the M4 line resulted to a higher yield: the 13% discrepancy became 6%: Most likely due to the V907 scattering effects
- Provided beam to g-2 all day/night

Tuesday 04/12:

- Since 6 am: Accelerator downtime
- EE support begun work on D:H910 and D:Q927
- Set/Read-out issues for H910 resolved by the end of the day

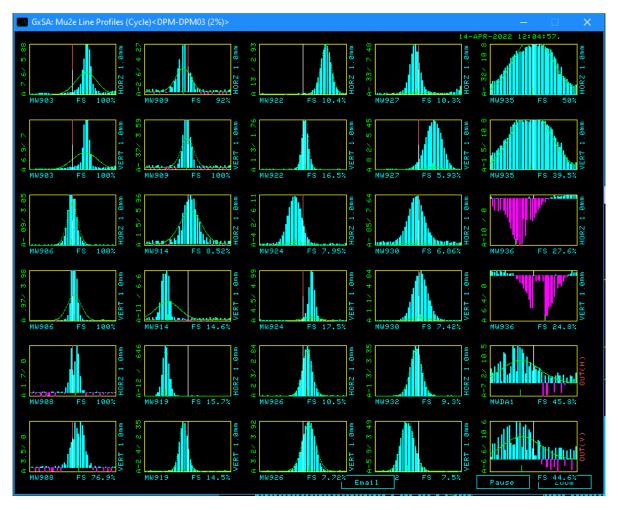


Activities for the Past Week (3)

- Wednesday 04/13:
 - Work on power supply Q927 complete: Now up and running
 - Beam provided to g-2 overnight after downtime was over
- Thursday 04/14:
 - Day: Run in the Mu2e mode to commission M4
 - Day Commissioned beam to DA for the first time! (see next slide)
 - Establishing beam to the DA satisfies Mu2e project key performance parameter (KPP)
 - Night: Provided beam to g-2
 - Noticed a drop in g-2 stored muons: we hope with upstream tunning to resolve this issue.



Beam commissioned to DA for first time



 We don't have an accurate number for the efficiency but we are confident that the efficiency is high

Fermilab

Plan for Next Week

g-2 operation:

- Continue delivering beam to g-2 for the rest of the week
- Continue studies in the Mu2e mode: Most likely ~2 shifts on April 21 but we will coordinate with g-2

