

SpinQuest/E1039 Update

(On behalf of the SpinQuest Collaboration)

Proton Program Management Group (PMG)
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Ievgen Lavrukhin



SpinQuest Spectrometer Status

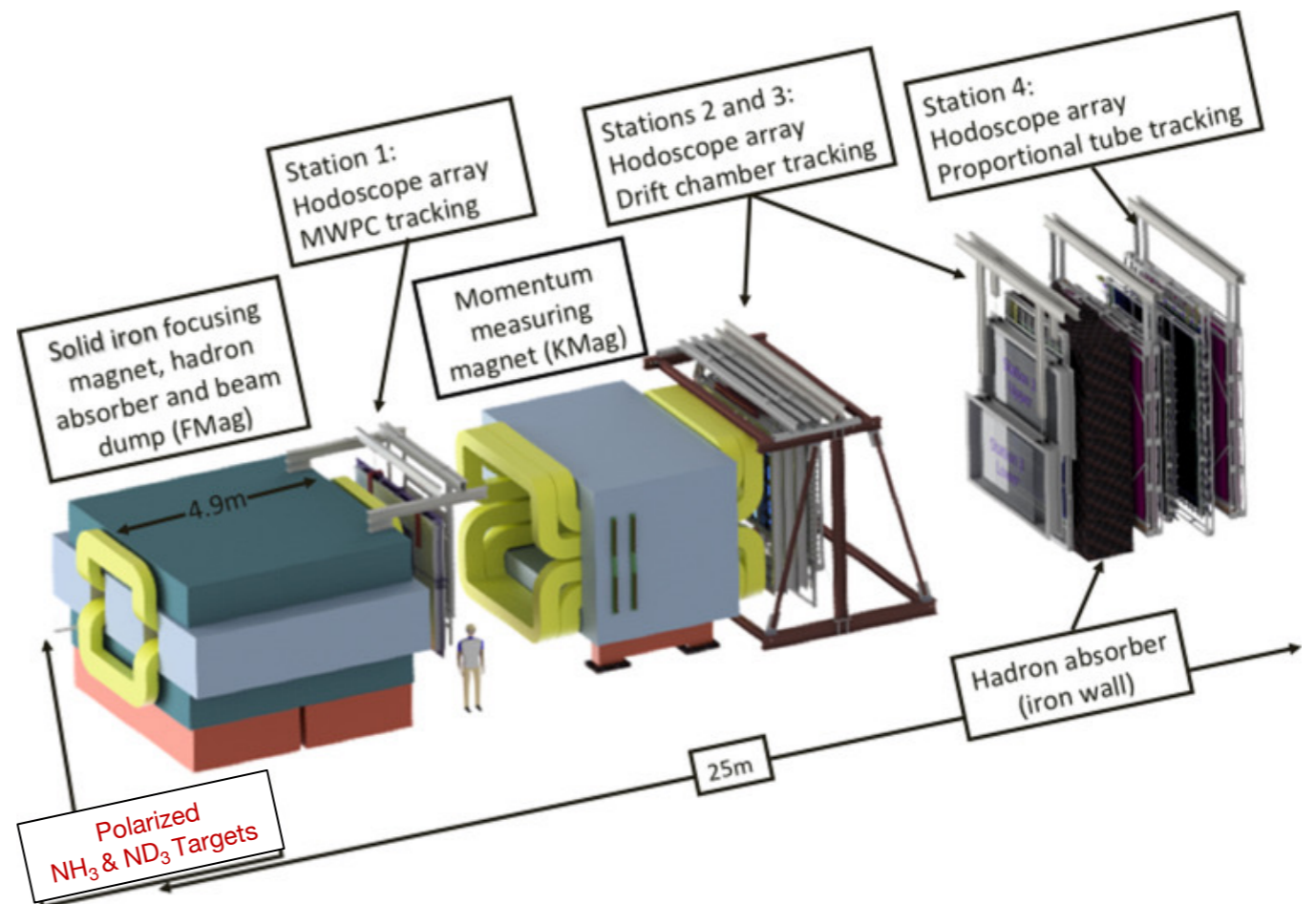
Spectrometer Status:

- All Detectors are in a working and meet requirements!
- DAQ and detectors are tested with cosmics.

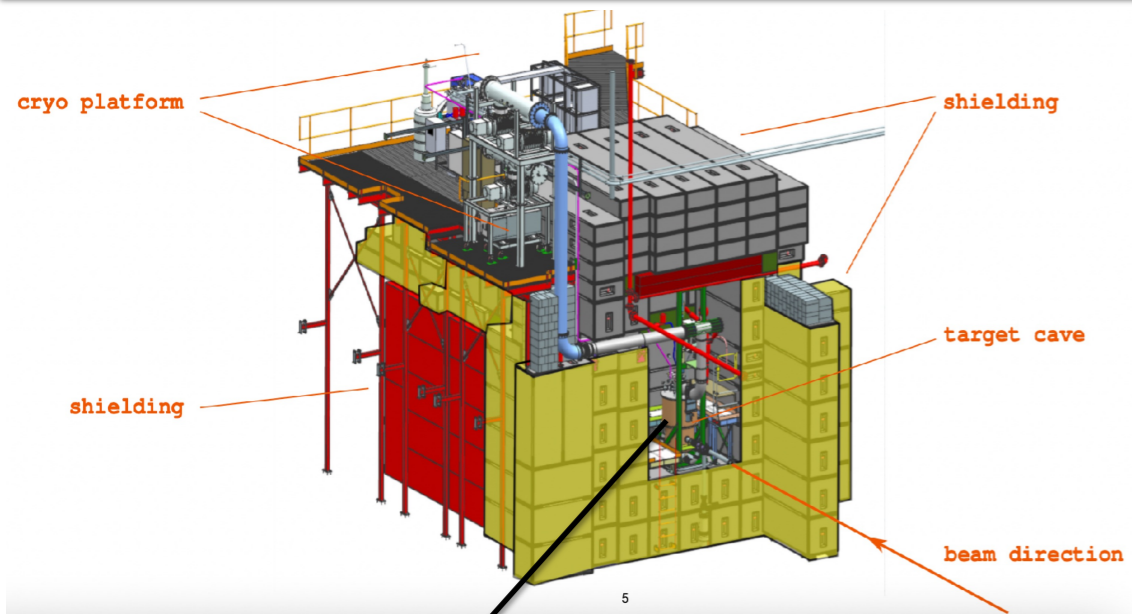
Remaining tasks before beam:

- Testing KMag and Fmag.
- Finalizing NIM-based calibration trigger.
- Finishing Dark Photon trigger integration into Main DAQ.
- Complete System Test.

=> Will be completed in 1-2 week!

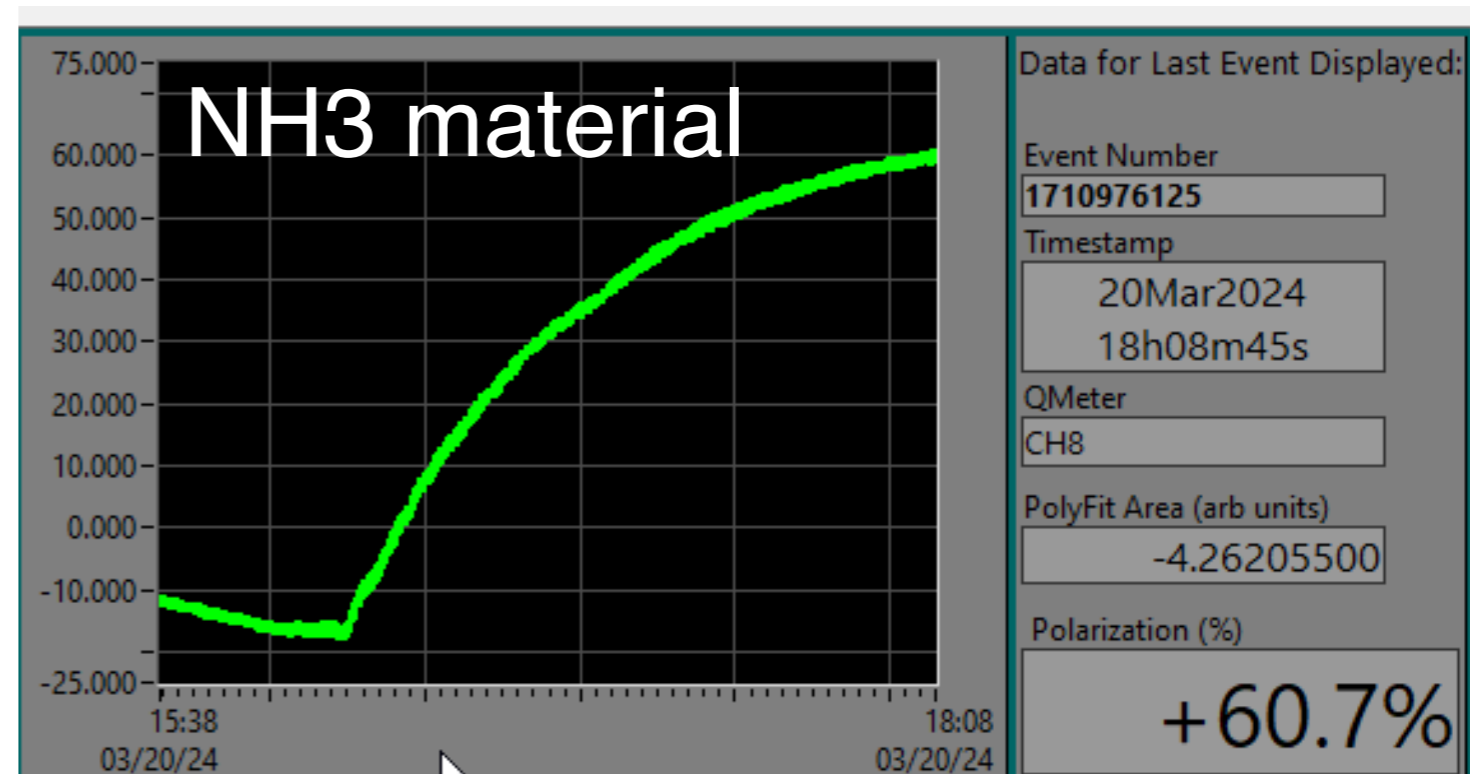
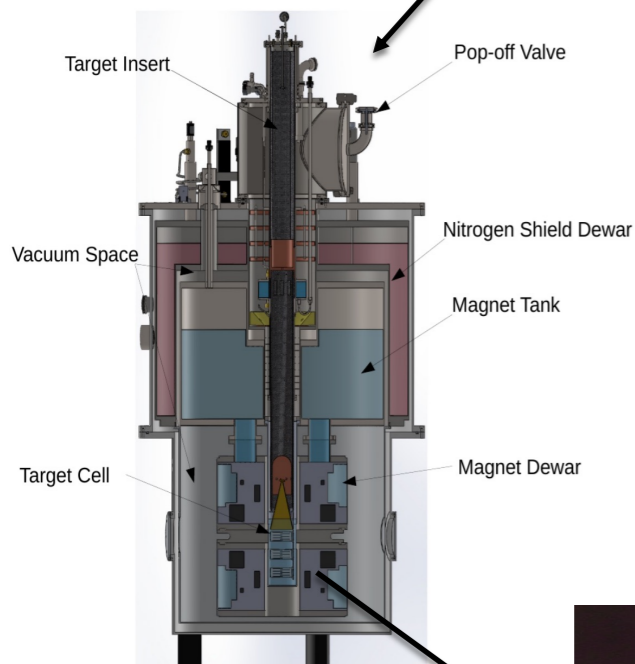


SpinQuest Target Status



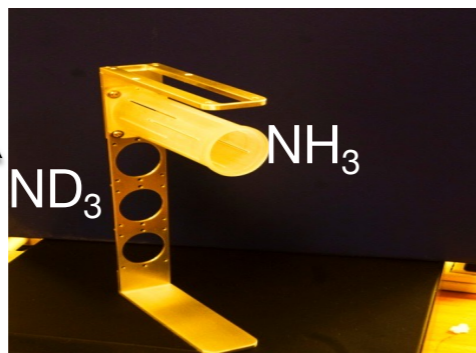
Target Status:

- Target is Fully installed passed all reviews!
- Permission to use ammonia!



Remaining tasks before beam:

- Routine target maintenance.
- Finishing UPS installation.



Commissioning with Beam and Day-One Physics

Commissioning with stable beam ($\approx 3-4$ weeks):

- Tune the operation of the spectrometer components in-beam.
- Commission the new FPGA-trigger for data taking.
- Verify operation of the DAQ, Slow Control, and Online Reconstruction systems in-beam.
- Determine the maximum on-target beam intensity at which cryogenic target magnet can operate without quenching.

Data Taking (remaining time):

- Combined J/ψ and Drell-Yan data taking.
- Dark Photon data taking at background.

Thank you!