

Polarized Target System for SpinQuest at FNAL

For more information: [SpinQuest Polarized Target](#)

UVA-PTGroup-elog: <http://twist.phys.virginia.edu:8081>

Polarized Target Monitoring and Maintenance Guide <https://seaquest-docdb.fnal.gov/cgi-bin/sso/ShowDocument?docid=10182>

How to connect to the Cryo-Control / QT Computer remotely?

[Target Maintenance Guide Revised_02-26-2023.pdf](#)

How to request NM4 (EXP27) and Building 327 (A5BB2) key

Supplies Catalogue: Inventory list (at Counting room) [Supplies Catalog]

Target Shifts: [Target Shifts](#)

Target expert duties: [Target Expert](#) (<https://confluence.its.virginia.edu/display/twist/Target+Expert>)

Helium Piping repair log (if you are planning to do a work by opening the helium piping, then record the outside gHe tank pressure before and after the work on the following spreadsheet)

https://myuva.sharepoint.com/:x:/s/as-physics-poltar/EfdYaKMJA3FGsmSNWzykfmCBRhUEJn_L6lpUnbzw97EyA?e=JOQh9o

How to order LN2 refill to the tank, gHe tube-trailer, LN gHe cylinders, and LN2 portable Dewars at FNAL

Zoom Links: [Zoom Links](#)

Registering a new device to Fermilab network: https://fermi.servicenowservices.com/kb_view.do?sysparm_article=KB0011206

For Windows OS: [VNC Viewer on Windows Platform.docx](#)

For Ubuntu / Mac OS: (on command line: make sure you installed Kerberos on your computer, also you will need an account for e1039gat1: please contact Kun Liu to create one)

```
kinit -f <YOUR_USER_NAME>@FNAL.GOV
> for QT computer:
ssh -N -L 9999:192.168.24.199:5900 <YOUR_USER_NAME_ON_E1039_GAT1>@e1039gat1.fnal.gov
> for Cryo computer:
ssh -N -L 9998:192.168.24.17:5900 <YOUR_USER_NAME_ON_E1039_GAT1>@e1039gat1.fnal.gov
```

For Ubuntu: Follow the steps as mentioned in the document: [Usage of Remote Access on Ubuntu.docx](#)

Link to Strip Charts: <https://e906-gat1.fnal.gov/data-summary/e1039/>

***** Alarms *****

See this page for the monitoring schedule [Target Monitoring Shifts](#)

Link to backups (ordering purposes):

<https://docs.google.com/spreadsheets/d/19thuGkqpo8E5ur69jbFGEyx7AE2m2zIVy-kkL3J7mimk/edit?usp=sharing>

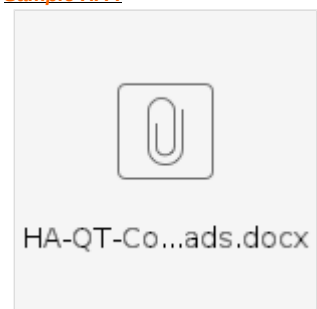
https://myuva.sharepoint.com/:x:/r/sites/as-physics-poltar/_layouts/15/Doc.aspx?sourcedoc=%7B07A8CC14-6C8A-4236-8B66-5A6122FB691E%7D&file=PTGroup_Purchasing.xlsx&action=default&mobileredirect=true

Cables on East/West Penetrations: <https://docs.google.com/spreadsheets/d/1KHIm25ZzsApTm0PRJM1kNqisLUiKE2Szm1Y9u3YIbY>
[Cable_List_Dec2022.xlsx](#)

SpinQuest Polarized Target System Manual

*** Set of Procedures on docdb and HAs (click)

1. **Training Requirements and Roles**
2. [Pictures at NM4](#)
3. **UVA-NMR System at NM4**
4. **Target Lifter at NM4**
5. **Microwave System at NM4**
6. **Helium Liquefier (QT) System at NM4**
7. [Insulation Vacuum Chamber \(IVC\)](#)
8. **Cooldown Phase 2023**
9. [Magnet Rack](#)
10. **Magnet Power Supply Ramping Up / Down Procedure**
11. **Magnet Shim Power Supply**
12. **Roots-Pump System Manual**
13. [Fridge Sensors](#)
14. **Fridge Valve Control System at NM4**
15. [Target-Insert Manual](#)
16. [Target Materials Related Information](#)
17. [Monitoring Layout in Control Room](#)
18. **Target Computer setup at NM4**
19. **Ongoing Tasks about Target Software**
20. [Annealing System](#)
21. [Gate Valve](#)
22. **Inventory list (at NM4 and UVA)**
23. [IP addresses](#)
24. [Sample HA :](#)



25. [Data Logs](#)
26. [Polarized Target Maintenance & Monitoring Activities](#)
27. [LN2 lines](#)

Purchasing Information (by the SpinQuest Collaboration) (< Click)

