

August 7th – DRAGON Meeting Minutes

In attendance: MJ (minutes), AG, PM, GR, AC, CR, MT, CV, PB, DH, DO, JD (via telephone)

Start time: 3:00 PM

Notes on last week's minutes

- Add CD to attendance but otherwise OK

Hardware

DO: Iris has arrived

- Quite large
- Still need to test conductance, may need to be sand-blasted
- Maybe look into a smaller one (from Gordon Wood)

PM: Whining noise in on of the pump

- Notified after the fact
- Noise has gone away
- Spare pump sitting around if we need a quick solution

AG, CR: All hardware involved with alpha tests is working

CR: There are one fewer channels than solar cells, so the middle pixel will not be active
Half of the cables are done, still in shop

Scheduling

CR: Maybe move our beamtime to August 20th if TITAN needs stable beam
ISAC forum tomorrow, will have answer about when our beamtime will be then

DO: There is still a fair bit of work to be done on TUDRAGON
-Gas pumping, new electronics, iris

DH, CR: Maybe a work-around with a screen would do instead of the iris
Mesh, iris, preamps all take a long time, do gas tests first
Running in August would make TUDRAGON impossible
Suppression tests the priority for beamtime

Na-22 / Seattle

CR: Traveling to Seattle this weekend
We now have a license to ship radioactive parts
Cryo-pump already shipped
Questions to ask:

- Do they have Na-23 targets, how many?
- How many TRIUMF staff involved
- Logistics of people going down
- DAQ system ready?

- Status of beamline?
- Do they need technical help?
- Overview of the timeline?
- Personnel on their end?
- Talk of a quadrupole mass spectrometer?

DH: -Safety report written up?

JD: Should have a copy of the data come back to TRIUMF
Perhaps an undergraduate student could do the analysis here

CR, MT: All of the targets are hot, but we are not sure what the activity is
They want to do the assaying themselves

Beam Development

CR: Would like O-15 beam, Beam development group not interested

JD: One day meeting in Europe on Targets/beam development (Sept 4th)
No TRIUMF representation, should collaborate more with other labs
Maybe JD will go?
Things learned may not be useful of the TRIUMF beam development group will not be willing to try new techniques

Alpha tests

CR: Next step rotate source, find optimum position, redo slit exercises (vent, turn, pump down, run)
Hopefully marking the source will improve reproducibility

AG: Slits at 3mm, typical runs 10 min, 100's of counts
Tested charge and mass slits, normal and -5% tunes, vertical slits only

CR: Results seem to confirm what Johnty found, problem at beginning of separator
Can use GEANT to simulate slits, compare current data to models

PB: Could moving source backwards/forward help?
Reversing the roles of Q1 and Q2 could give information about why Q1 -5% helps
From optical analog, Q1 -5% changes focal point allowing for less deflection of stray rays in MD1

DH: Swapping Q1 and Q2 difficult, maybe possible to test in GEANT

CR: This round of alpha tests should be completed by the end of the week

Other business

CV: Opportunity to submit improvements to DRAGON
-Contamination detectors?

Time 4:10 PM

