



FAST Facility / IOTA Machine Report

Daniel R. MacLean AD-Ops Meeting Friday, 0900 18-August-2023

FAST / IOTA

- Relatively smooth week through Thursday PM, Cryo system failed overnight: currently down as of this AM
 - o Not a surprise: Joaquim estimated loss of liquid Helium in some or possibly all SRF cavities sometime before E.O.W.
 - System has been unstable for close to a week (see: <u>246383</u>)
 - Could take up to 1.5 weeks to recover / pump-down while purifiers are regenerated
- Problem w/Cryomodule HLRF charging supply continues to trip off the system
 - o Charging Supply phase controller faults large overcurrents burn out fuses for different (random) 480 Vac phases
 - EE Support personnel are aware & investigating, cause(s) currently unclear Nick Gurley & Co.
 - Now have scope + transient recorder setup to monitor further trips w/greater resolution
 - Cleared to run in meantime until another trip occurs
 - o See: <u>246299</u> & <u>246332</u>
- IOTA150-NIO running most days, NEB crew runs in the 50 MeV Line to the LEA 1 to 2 mornings/week
- IOTA150-NIOLD running mostly in-parallel w/NIO troubleshooting was required; dedicated shifts soon...
- Contact me w/any beam or access requests [x6944, dmaclean@fnal.gov]

