



FAST Facility / IOTA

Machine Report

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AD-ARD Dept. Meeting

Friday, 1100

29-September-2023

FAST / IOTA

- Recovered from Cryo thermal bump Monday evening, which has reportedly worked well to purify the system
 - John Wieland & I tuned-up all SRF cavities that night, beam re-established beam early Tuesday morning (see: [247857](#))
 - Some initial Cryo instabilities but these have settled-out since and everything now appears stable
- At this point, we are running roughly 24/7: trying to maximize efficiency while machine is stable & push to end of Run 4
 - Main factor in finalizing the end-of-run date is the IPI cable pull: once this date is known, we will set a hard stopping point
 - Need sufficient time to get enclosure de-posted to ODH-0 ahead of IPI installation
 - In communication w/Cryo personnel to arrange this once a solid end-date is established
 - IOTA150 crews rotating smoothly – *NIO, NIOLD, SETI, LADR*
 - NEB wrapping up their program in the LINAC – *mostly AM (0600 - 1200) shifts*
- ACNET / Erlang FE outages Thursday: generally painless
 - Minor issue w/initializing Synoptic applications via Index pages – *resolved & working fine now*
 - Big thanks to Adam Watts & Co. for communicating + assisting us in getting back up as smoothly as possible
- CC1 HLRF system is problematic again – *identical to issues seen back in July*
 - Consistently missing pulses / having partial RF fills, occasionally causes the cavity to trip on reflected power at the Coupler – *resets & comes back w/o issue*
 - Pattern is completely random, and the frequency at which this happens varies – *full-on trips tend to occur w/multiple bad fills in rapid succession*
 - Technically not holding us off, but does kill beam before it reaches the Cryomodule during bad pulses
 - Ding Sun is aware & investigating
 - See: [247936](#)