



MTA Update



Yağmur Torun Illinois Institute of Technology



MAP Weekly Meeting FNAL – Oct 23, 2015



Overview



Infrastructure

- 805-MHz klystron replaced
- DAQ hardware/software upgrades

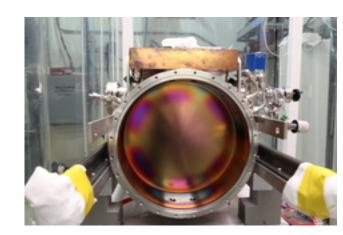
HPRF cavity

- 1st high-power test run with dielectric loading finished last month
- donuts inspected
- assembly with new seals in progress

Modular Cavity

- (3rd half of) 1st B=0 run completed
 Oct 10
- inspection in progress
- MICE cavity
 - on standby







Operations: Modular Cavity Run



- Ran for >140 hours over 13 days (Sep 28-Oct 10)
 - up 24 x 7 except during outages, equipment problems
 - with 93% shift coverage: Daniel Bowring, Ben Freemire, Terry Hart, Alexey Kochemirovskiy, Al Moretti, YT
- Safe operating gradient and breakdown rate vs gradient established in B=0 for Cu plates
- X-ray rates and spectra saved
- Data analysis in progress
- Removed Oct 12, partially disassembled Oct 19, inspection in progress



Status/schedule



Infrastructure

- need to retrain solenoid
- both RF stations under repair

HPRF

- new seals to be tested
- run with the other alumina donut(s) when ready
- prepare for beam test

Modular Cavity

- interior inspection
- re-assemble, run (B>0)
- repeat

MICE

- vacuum system service before next run
- explore dark current with new detector configuration
- install new coupler(s) when ready
- prepare for beam test
- Contingent on availability of RF sources, tech labor
 - Fermilab accelerator complex shutdown complete
- Analysis/documentation effort continuing
 - detector calibration
 - X-ray spectrum data



