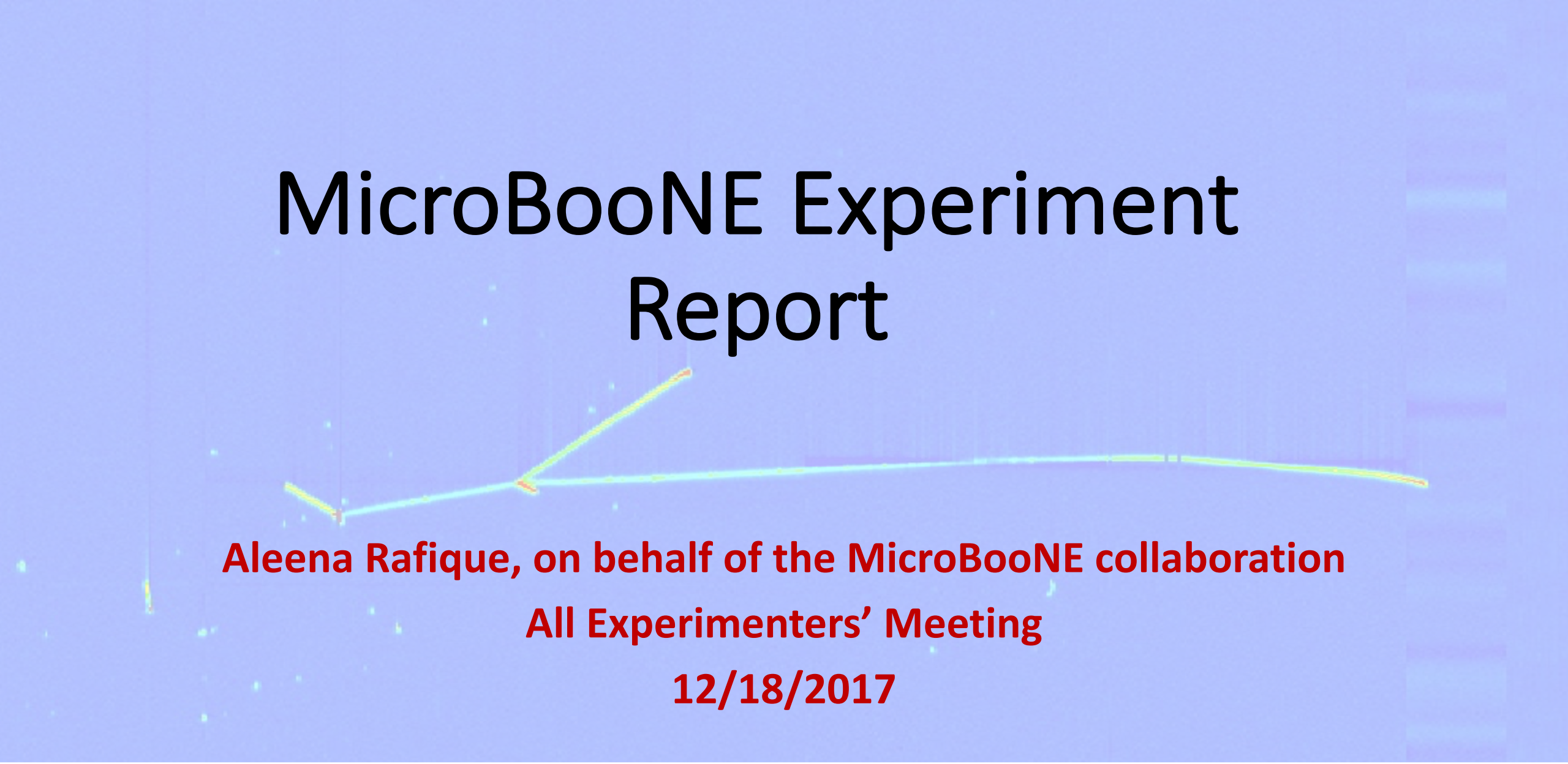
MicroBooNE Experiment Report



Aleena Rafique, on behalf of the MicroBooNE collaboration

All Experimenters' Meeting

12/18/2017

Fermilab

μBooNE

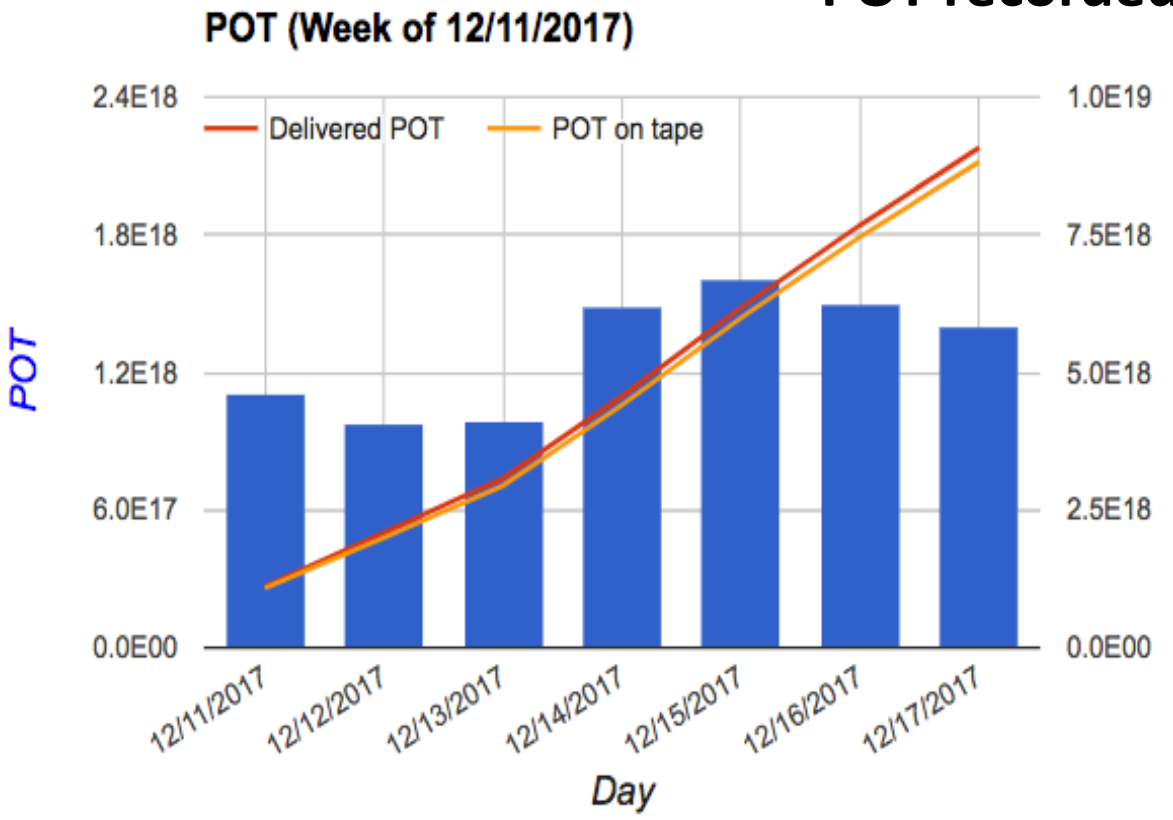
Beam Statistics

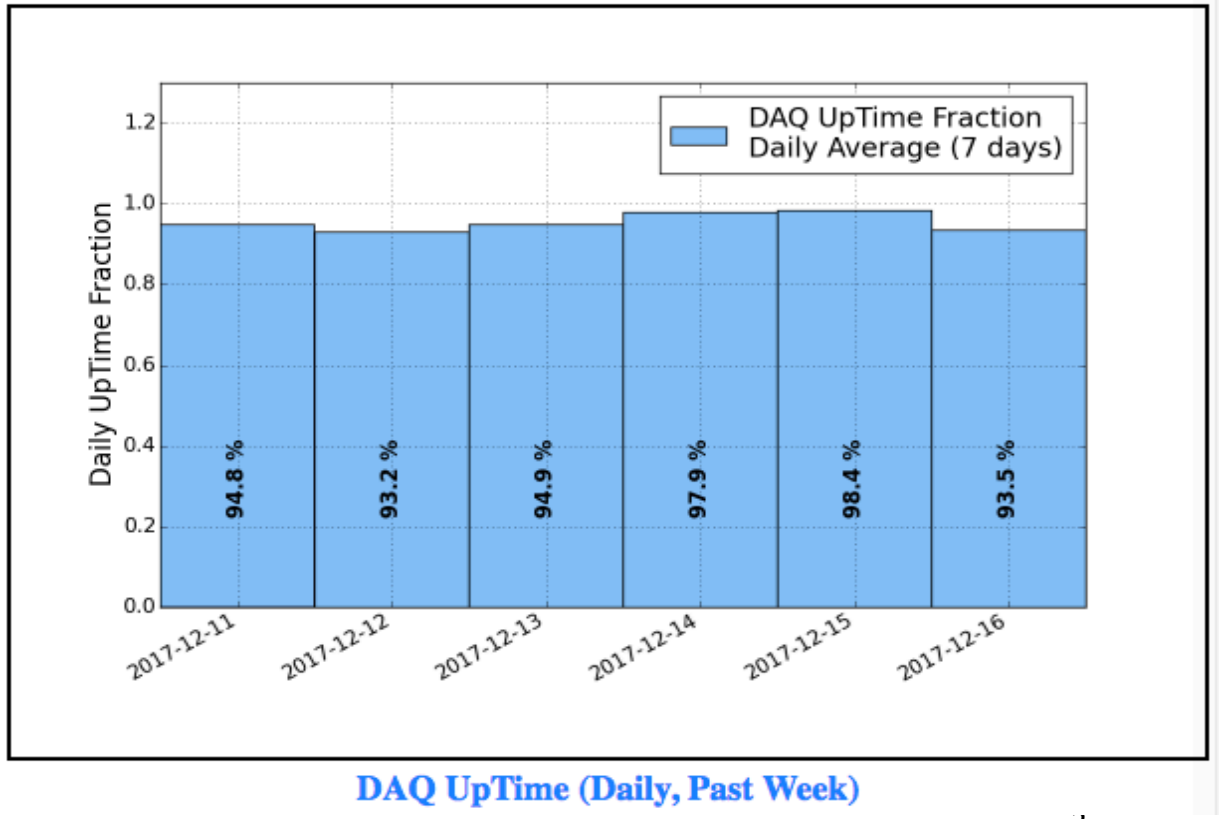
Average BNB uptime: 97%

POT delivered: 0.91X10^{19}

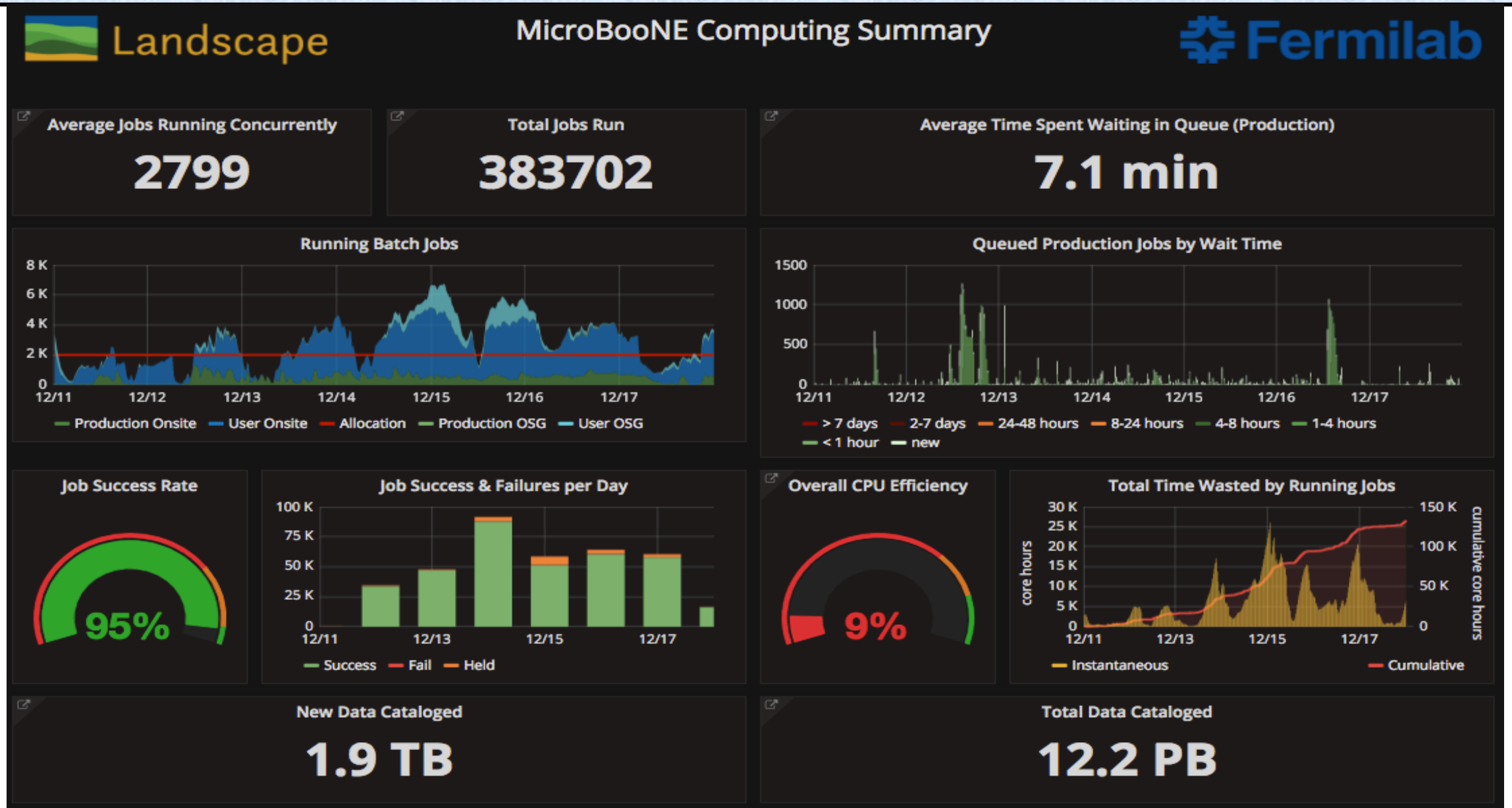
POT recorded: 0.88X10^{19}

Average DAQ uptime: 97.2%





Computing Summary



Cryo Work

- Replaced spare recirculation pump with the rebuilt one in LArTF
- Caused a short that resulted in power to be lost in the active recirculation pump
- quickly diagnosed and resulted in ~2 hours of pump less detector operation.
- Data taken during this time still usable for physics

New Software Trigger

- Added a new software trigger to increase the bandwidth to BNB data
- lowered the light collection threshold (6.5 PE → 5.0 PE)
- The new trigger is an addition (not replacement) to the existing trigger settings.

Data Management

- Successful retreat on validation of slimmed data/MC files was held last week (Tues-Thu)
- Decision was to proceed with data slimming and production is ongoing.

Microboone Datasets Production

Full Run 1 MCC8 Reprocessing/Filtering using v06_26_01_09 (MCC 8.5)

Input	Reconstructed	Analysis Tree
prod_bnb_swizzle_inclusive_v3 (describe, summary, files)	prod_reco_optfilter_bnb_v11_mcc8 (describe, summary, files)	prod_anatree_optfilter_bnb_v11_mcc8 (describe, summary, files)
prod_extbnb_swizzle_inclusive_v3 (describe, summary, files)	prod_reco_optfilter_extbnb_v11_mcc8 (describe, summary, files)	prod_anatree_optfilter_extbnb_v11_mcc8 (describe, summary, files)

Summary

- MicroBooNE is running stably with continuous neutrino data-taking
- Cryo regular maintenance work successfully completed after replacing the recirculation pump
- Additional software trigger by lowering light collection threshold has been implemented
- Data/MC event size reduction has been validated last week, full sample production is ongoing