

Proposed List of Figures (work-in-progress- please edit, add, or delete):

1. An artist's rendition of bunched neutrinos, created by protons with a 500 MHz RF structure, traversing a large detector.
2. Current Fermilab LBNF physical layout (target/horn, decay region, near and far detectors).
3. Current Fermilab 53 MHz RF structure and proposed 500 (530?) MHz structure.
4. Current 53 Fermilab RF cavity and proposed 500 (530?) MHz RF Cornell-B? cavity.
5. The width of the proton bunch after re-bunching as a function of adiabatic time constant for turning on the higher frequency RF.
6. The fractional effective loss of protons on target (POT) due to the longer cycle time as a function of the adiabatic time constant for turning on the higher frequency RF; (do we include the time to turn down the 53MHz, or is this included already?).
7. The distribution of proton intensity in one bunch after a 500 MHz RF re-bunching, assuming a reduction of no more than 5% of POT due to the longer acceleration cycle.
8. Distributions of the number of events versus time relative to the proton bunch of e, mu, and tau neutrinos and anti-neutrinos for a delta-function proton bunch and Forward Horn Current (FHC) . The distributions are shown for five energy bins in addition to the total.
9. Distributions of the number of events versus time relative to the center of the proton bunch of e, mu, and tau anti-neutrinos and neutrinos for a delta-function proton bunch and Reverse Horn Current (RHC). The distributions are shown for five energy bins in addition to the total.
10. Distributions of the number of events versus time relative to the center of the proton bunch of e, mu, and tau neutrinos and anti-neutrinos for Forward Horn Current (FHC) assuming the current 53 MHz RF bunch structure.
11. Distributions of the number of events versus time relative to the center of the proton bunch of e, mu, and tau anti-neutrinos and neutrinos for Reverse Horn Current (RHC) assuming a 500 MHz RF bunch structure.
12. Fractions of e, mu, and tau neutrinos and anti-neutrinos in 50 (upper-right panel), 100 (upper-left), 250(lower-left), and 500 (lower-right) psec bins relative to a delta-function proton bunch.
13. Fractions of e, mu, and tau neutrinos and anti-neutrinos captured in 50 psec (upper-right panel), 100 psec (upper-left), 250 psec(lower-left), and 500 psec (lower-right) bins relative to a delta-function proton bunch.

14. Fractions of e, mu, and tau neutrinos and anti-neutrinos captured in 50 psec (upper-right panel), 100 psec (upper-left), 250 psec(lower-left), and 500 psec (lower-right) time bins with a 500 MHz RF structure. The binning is such that the central bin is centered on the peak of the proton bucket distribution (it's late and I'm muddled- this will need fixing- HJF).
15. Fraction of 'wrong-sign' anti-neutrino background in e, mu, and tau neutrinos for Forward Horn Current captured in 50 psec (upper-right panel), 100 psec (upper-left), 250 psec(lower-left), and 500 psec (lower-right) time bins with a 500 MHz RF structure. The binning is such that the central bin is centered on the peak of the proton bucket distribution.
16. Fraction of 'wrong-sign' neutrino background in e, mu, and tau anti-neutrinos for Reverse Horn Current captured in 50 psec (upper-right panel), 100 psec (upper-left), 250 psec(lower-left), and 500 psec (lower-right) bins with a 500 MHz RF structure. The binning is such that the central bin is centered on the peak of the proton bucket distribution.