

IFIC group week report

*Pablo F. – IFIC
2018/10/18*

protoDUNE-SP status

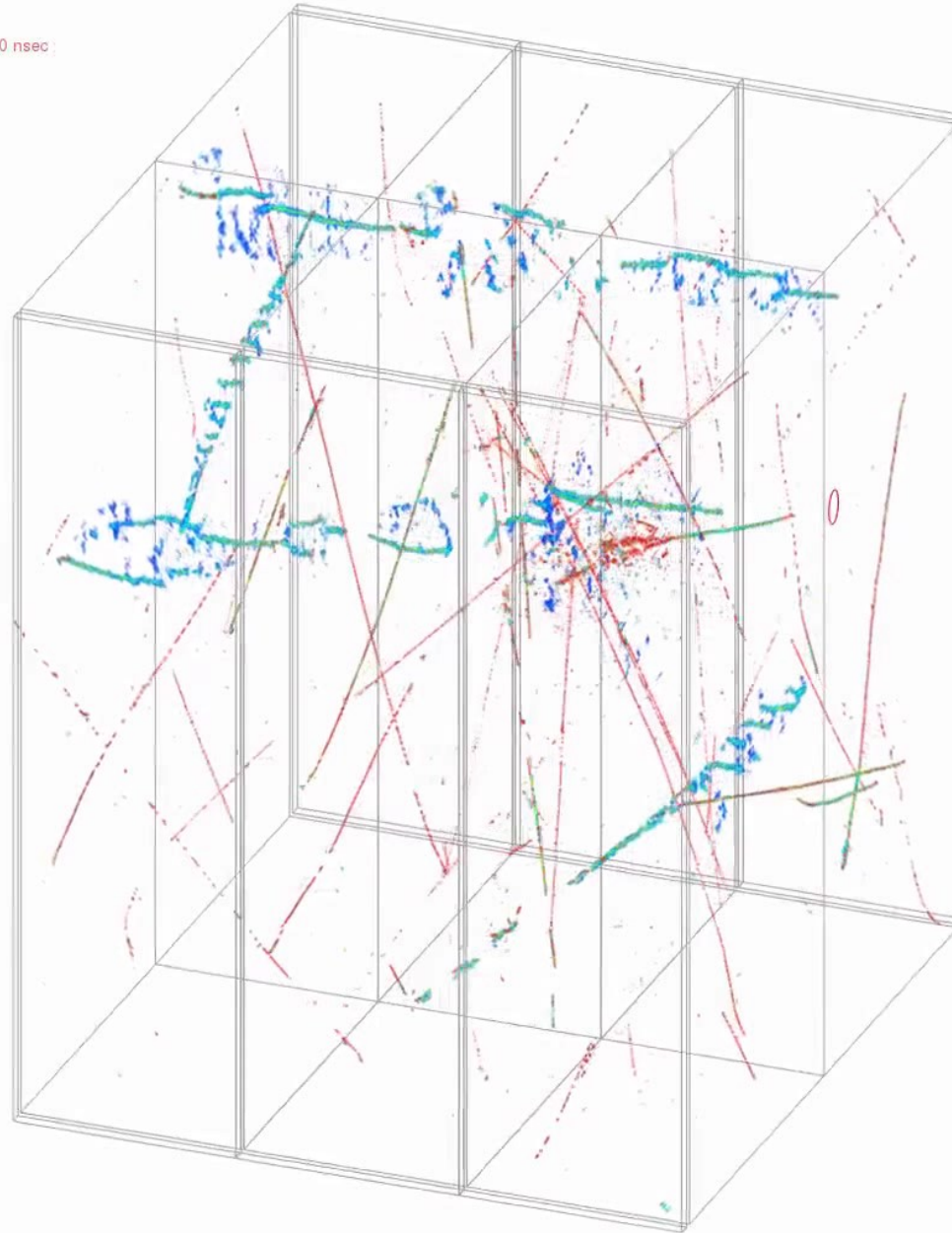
Running rather stably with beam

Ottobre 2018

| Lunedì | Martedì | Mercoledì | Giovedì | Venerdì | Sabato | Domenica |
|------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------|-----------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 Beam off 8am - 6pm 6pm-midnight: 7 GeV all trigger | 11 7 GeV all trigger | 12 1 GeV Pi and proton veto on electron | 13 1 GeV Pi and proton veto on electron | 14 1 GeV Pi and proton veto on electron |
| 15 1 GeV Pi and proton veto on electron | 16 1 GeV Pi and proton veto on electron | 17 Beam off 8am - 6pm 6pm-midnight: 6 GeV all trigger | 18 6 GeV all trigger | 19 2 GeV Pi and proton veto on electron | 20 2 GeV Pi and proton veto on electron | 21 2 GeV Pi and proton veto on electron |
| 22 2 GeV Pi and proton veto on electron | 23 2 GeV Pi and proton veto on electron | Beam off | | | | |

As of yesterday morning, the e lifetime from purity monitors are:
3.32 ms (bottom) (*still significantly lower purity at the bottom*)
4.74 ms (middle)
4.21 ms (top)

Event: 5145 - 1 - 160661
Thu, 11 Oct 2018 02:29:59 +0000 (GMT) + 0 nsec



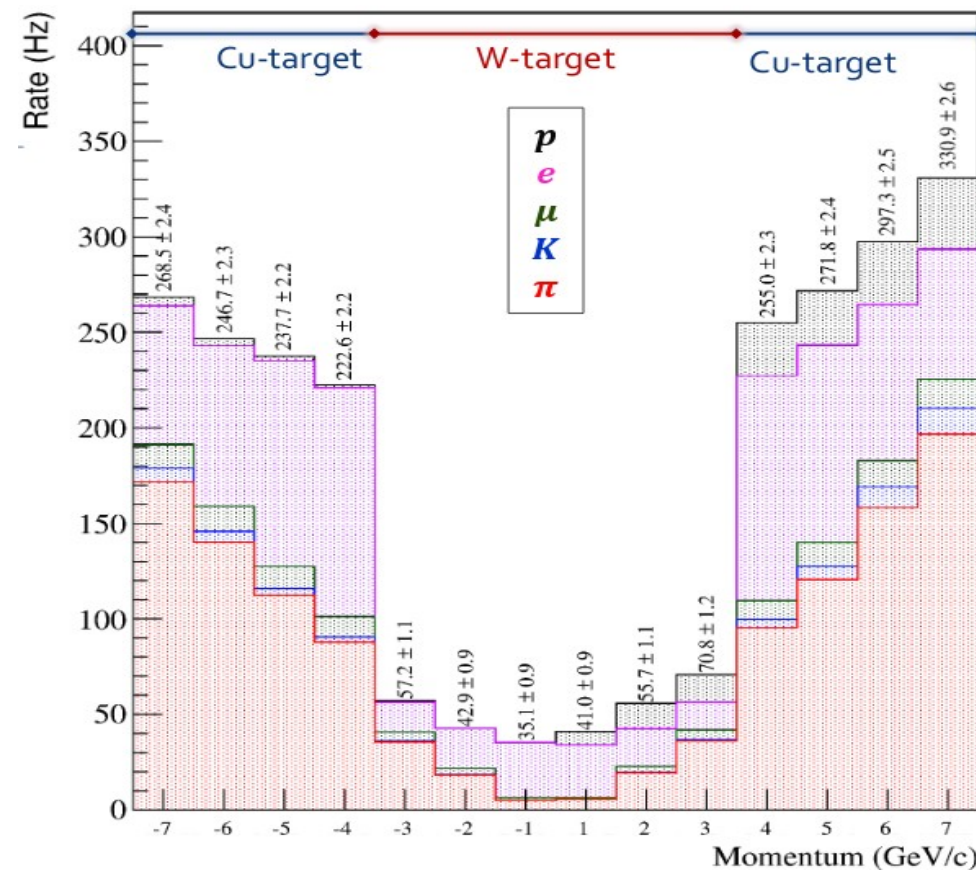
protoDUNE-SP status

Reconstructed files for protoDUNE-SP are being processed at Fermilab since last Wednesday and stored at Fermilab and CERN machines

The reconstructed files are huge and there is no plan for making lighter analysis ROOT files

Anselmo and I have had a brief discussion concerning the analysis for protoDUNE)

- Manage to install HighLAND in Fermilab machines (will be very useful for producing light analysis files)
- Learn from Sasha some of the details of the secondary stopping kaons analysis, and look for other potential analyses to be done



protoDUNE-SP status

| Momentum [GeV/c] | e+ | K+ | mu+ | p+ | pi+ |
|------------------|--------|-------|-------|--------|--------|
| -7 | 27.43% | 3.39% | 0.97% | 1.28% | 66.92% |
| -6 | 33.46% | 2.85% | 1.16% | 1.27% | 61.26% |
| -5 | 43.21% | 1.93% | 1.28% | 1.07% | 52.52% |
| -4 | 54.55% | 1.10% | 1.37% | 0.63% | 42.34% |
| -3 | 28.38% | 1.14% | 2.28% | 1.41% | 66.78% |
| -2 | 48.89% | 0.26% | 1.83% | 0.39% | 48.63% |
| -1 | 81.68% | 0.16% | 1.09% | 0.16% | 16.93% |
| -0.4 | 98.27% | 0.00% | 0.43% | 0.00% | 1.30% |
| 0.4 | 99.07% | 0.00% | 0.00% | 0.46% | 0.46% |
| 1 | 69.26% | 0.00% | 1.56% | 15.30% | 13.88% |
| 2 | 34.94% | 0.64% | 2.46% | 22.93% | 39.04% |
| 3 | 19.93% | 2.75% | 1.81% | 18.93% | 56.59% |
| 4 | 47.07% | 1.58% | 1.28% | 8.75% | 41.33% |
| 5 | 37.04% | 2.84% | 1.28% | 9.35% | 49.50% |
| 6 | 28.07% | 3.98% | 1.32% | 10.42% | 56.21% |
| 7 | 20.59% | 5.15% | 0.98% | 10.65% | 62.64% |