

Interventions on PMT system

During the 2004 beam shutdown, a set of minor interventions on the PMTs and laser systems is foreseen:

● PMT system:

- Rearrangement of PMT electronic cabling (analog, digital, HV, AC) with the removal of faulty and obsolete cables and the redesign of cable path inside the racks.
- Perform dedicated data acquisition with different V1730 settings of the configuration registers for better understanding the baseline stability.
- Perform dedicated data acquisition with different ACQ setting (firmware) for better understanding crashes induced by digitizers (in collab. with CAEN).

● Laser system:

- Swap of the current laser head with the spare unit just arrived at FNAL which allows an increase in light intensity of approximately 30%.
- Replacement in the light distribution system of the present 1x6 splitter (only 4 outputs are used) with a 1x4 unit, which allows a further increase in light intensity of approximately 25%.

An overall increase >50% of the light seen by the PMTs is expected

- Installation of a laser stability monitor based on a PMT inserted in the PMT acquisition chain.