

Linac4 application needs

Instrumentation :

- slow wire scanners (needed for chopper line); adapt ISOLDE scanner application (**short term**)
- Faraday Cups were foreseen on Oscilloscope only. However it should be possible to put the signal onto a fast sampling ADC (e.g. SIS3300) and read this with a sampler (**short term**)
- SEM grid (needed for source), relatively soon! Use the generic applic; the FESA class for the SEMGrid readout should be made compatible to this application (**short term**)
- transformers, needed for source and 3 MeV tests, can also be put on a scope for the moment; the ones to be installed on the 3 MeV line will be compatible to the Linac-2 ones; the Linac-2 apps could be used. The FESA class is available (**short term**)
- emittance scanner in progress (LabView), will at some point need a JAVA program but later (**short term for the LabView program, long term for the JAVA program**)
- BSHM: stand-alone OK
- screens (VOS/BTV?) (**long term**)
- foil monitoring (**long term**)
- Feshenko monitor (what will have to be developed?) -relatively soon as it goes on the movable bench (**short term**)
- trajectories (Linac4, new and old transfer line) (**long term**)
- LBE/LBS measurement lines (**long term**)
- BLMs

Source/LEBT :

- control of source parameters (gas, RF, ignition, HT etc), and basic diagnostics (F Cup and transformer) in one console. It should also access the standard logging system to return source parameter histories (**medium term**)

3 MeV line :

- Remote controls front end of the power converters/ responsibility PO
- application for controlling LEBT and chopper line magnetic elements and saving settings (**medium-term**)
- application for the RF elements of the 3 MeV line (bunchers + RFQ) (**medium-term**)

other :

- dump current monitoring (if dump design at PSB injection will be as proposed) (**long term**)