

# LINAC4 Report

FOM – February 27, 2018

## Some of the work done during the YETs:

- Iris to beamstopper
- Upgrade of LLRF system (hardware, firmware, FESA 2 => 3, Inspector panels)
- Maintenance of high power RF system, new type RF pickups (CCDTL3), commissioning of Debuncher amplifier

## Restart

- Source in operation since Feb 2<sup>nd</sup>
- DSO test on Feb 13<sup>th</sup> successful: beam permit received
- Up to 20mA transported through the RFQ on Feb 19<sup>th</sup>
- Lots of work on LLRF: re-establishing reference phases
- Phase-scans proceeding with difficulties (some sparking)
  - 26/02/2018: beam through the DTLs and next cavities, good phases till CCDTL1 found.
- Source restarted very stably, very few HV trips (manual operation, no automatic restart)
  - During weekend, source stopped pulsing due to problems with vacuum in source:
    - ❖ L4L.VPGR.0126.6 turbo pump exchanged and gas injection valve voltage system exchanged 26/02/2018
- Plans for this week:
  - Re-establish stable RF operation and continue with phase scans (testing ToF app, better precision), if possible up to 160MeV
  - Work on optimal settings for pulse flatness on 3MeV beam