ELENA Commissioning Status





Summary of last week:

- Cycle accelerating and decelerating the beam
 - □ Improved setting of working point on Monday
 - Quality of tune measurements depending on orbit?
 - □ Orbit correction during deceleration (two ramps with intermediate plateau at 35 MeV/c)
 - First five SVD vectors to keep strengths (and maximum of derivative of current) small
 - Loss towards 100 keV (similar to pbar loss in 2018?)
- Interventions on Tuesday (magnetic pick-up, profile monitors, ion switch converter, exchange of tune meter CPU, investigations on LNE07 quad connection ...)
 - □ LNE00.BSGWA.0611 broken actions to be discussed
 - □ LNE07.QF42, only one polarity had been connected => solved now
- Start of fine tuning of beam distribution by SY/ABT team
 - □ Special setting with bunching beam with harmonic number h=4 (long buches with lower intensity)
 - □ Scan on start fine delays of fast deflectors in transfer line
- Studies on magnetic pick-up calibration continued
- Number of movements of profile monitors since restart and Monday between 0 (e.g., LNI.BSWG.0060) and 25 (LNE00.BSGW.0008)





ELENA Commissioning Status





Various:

- Maximum ramp rate of corrector magnets to be increased (avoid limitations of cycle generation and orbit correction due errors from FGC3 class)
- Ion switch converter maximum currents increased and problems on Friday
- Magnetic pick-up calibration studies still on-going
- Adjustments of orbit at cooler (additional knobs?)

Program for coming week (coordinator: Laurette):

- □ Monday:
 - Morning:
 - Afternoon: transfer line studies
- □ Tuesday: intervention (longitudinal pick-ups, profile monitor TDR, source H⁻ cartridge exchange ...)
 - Afternoon: B-train firmware (WR) update
- □ Wednesday
 - Morning:
 - Afternoon: transfer line studies
- □ Thursday
 - Morning: Schottky and cooling studies
 - Afternoon: transfer line studies
- □ Friday
 - Morning:
 - Afternoon: transfer line studies

Possible studies:

- Electron cooler
- Acceleration/deceleration
- GBAR operation/test
- Injection line setting

- ...

25th January 2021