ECC 31/8/2017





- Agenda:
- Approval of minutes
- Recent beam progress
- RF progress, issues & priorities
- Beam profile measurements
- E-cooler magnetic measurements
- AOB

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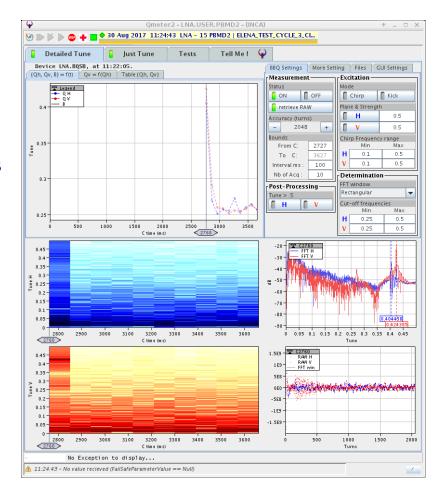
ECC 31/8/2017





Recent activities:

- Pbar shifts mainly used for RF and scraper system commissioning
- 2 days for survey system measurements
- B-train calibration
- BBQ tune measurements
 - □ Pbars at 5.3 MeV, no excitation
 - ☐ Verified by change of tune settings

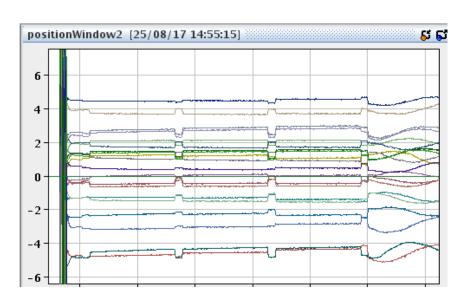


Issues





- Bpm signals have jumps spaced by ~
 160 ms.
- 2kHz occasional freq. offset at 5.3 MeV. Seems ok after B-tran high marker timing adjustment
- H- trajectory and injection not reproducible.....
- H- not very useful for beam commissioning for the moment



ELENA Beam Commissioning – next steps





| Consolidation of injection line and injection into ring | |
|--|---|
| | Improved reproducibility of injection – efficiency should be increased (H-) |
| | Further studies to understand and empirically improve line and injection |
| ■ First 85 keV beam (H ⁻ and/or protons) for GBAR | |
| | Requires profile monitors – 2 out of 3 installed. No readout electronics yet |
| | Setting up of RF synchro for Gbar H- ejection |
| Pbar xfer from AD | |
| | Set-up RF synchro |
| (Acceleration) Deceleration | |
| | Setting up of LL RF; phase and radial loops |
| | LPU signal quality vs. phase/radial loops |
| Setting up of antiproton cycle | |
| | Requires electron cooler to be available and installed |
| Commissioning of instrumentation and | |
| understanding machine at low energy | |
| | Orbit system – consolidate orbit correction (some corrections done successfully) and orbit response studies |
| | Tomoscope – observe bunching & independent intensity estimate) |
| | Tune (measurement and) corrections |