Goals & Achievements

- *Stated in July 2018:*
- Reminder: before dismounting the present AD ejection lines (point of no return), we need to demonstrate:
  - Decent deceleration efficiency (60% in design report) ☹☺
  - Good enough lifetime at 13.7 MeV/c ☺
  - Efficient cooling at both plateaus ☺
  - Acceptable emittances, lifetime & blow-up with bunched beam prior to extraction ☺
  - Beam transfers to Gbar ☺
  - Stability & reproducibility ☺

Remaining set-up & studies, a selection…

- Eliminate losses on last ramp
- Identify other losses
- RF noise ?
- Gbar transfer line studies
- E-cooler: further optimisation at 35MeV/c, (+ tuning of e-beam)
- Optics validation & transfer optimisation AD=>ELENA
- …
- Ring optics studies/validation (chromaticity, acceptances, lattice validation, etc.)
- Space charge studies on higher intensity beams (extraction on lower harmonics)
- …
- Ejection lines in 2020: ~ 100 m of new beamline set-up !
  - Stable H- source will be needed in LS2!