

# AD status

- Stable running from the start-up until early September with  $>3E7$  pbars/cycle ejected and very little downtime.
- Excellent beam quality (transverse and long. Emittances)
- Increased downtime and reduced intensities (losses during the last ramp) during the last 2 weeks due to:
  - C02 RF system: resettable trips, self-recovering trips, controls problems, intermittent longitudinal blow-up
  - Orbit jumps
  - Injection/ejection kickers: trips sometimes needing specialist resets
  - Unstable horizontal position of ejected beam (ejection septum)
  - Power converter controls problems
  - Electron cooler trips needing long re-starts
- 3400 Physics hours realised so far
- Beam availability since 25/4: 83%, AD machine uptime: 90%

- News from the weekend: short circuits at ring magnet connections, likely to be the cause of some of the beam losses
- Most likely caused by bake-out jackets grounding some current from the main quadrupole circuit touching the coils at two different quads.
- We fixed it at those places, but there are many other places looking dangerous. To be followed up.

