

- tuning NMR in the IBC with the Run 2 HD target
  - large H<sub>2</sub> impurity ➤ short T<sub>1</sub> ➤ up to 1.5 % H polarization in IBC
- beamline modifications upstream of IBC
  - found source of Run 1 “dog-leg” ⇔ viewer was moving in off-center ⇔ *ie.* no dog-leg
  - installed HARP on beamline before IBC
  - installed beam-limiting apertures to protect HD against beam motion
  - repaired *Rogowski coil* BPM
- Simulations show we will be able to center beam and raster *through* the Run 2 HD target
- *Booster* cooled to 4K on Oct 23 in preparation for Run 2

Goals for next week: Run 2 starts Tuesday, Oct 27<sup>th</sup>

- recover & check beam orbit at low current; commission HARP; test repaired Rogowski coil
- test new Raster Waveforms
- verify Aperture positions
- with beam centered on target, check IBC position reproducibility by rotating down & up
- verify energy deposition in target by measuring temperature rise at a series of currents
- ...