

# Cooldown Prep

- Point of no return is Oct 15: If we don't secure funds by that time we push till after Collaboration meeting
- Collaboration meeting is Nov 8-9, we should all go and present and get training out of the way if possible
- Down at Jlab for Oct 2-10
- Hope of have practice cooldown with LN2
- Check out safety docs for cryo-handling

# Specialty Breakdown

- Zulkaida : Magnet, Turbo, LabView
- Josh: Microwave, NMR, LabView
- Carlos: Fridge, Annealing, Flows/pressure
- Liliet: Sensors Calibration, Target Material
- Arthur: E1039 systematics?

# Magnet

- Power supply and Turbo setup
- Setup power supply and VI(DR) for magnet
- Setup turbo and control VI out of reach of the field as well as VI for pressure readout
- Setup trubo away from field, probably should setup fail safe system and with valve in case of turbo failure
- Setup temperature sensor and readout on PC

# Fridge

- Connect fridge and utilities
- Calibration of manometer
- Repair temperature sensor connections
- Test valve clutches: protection and reproducibility
- Setup software control of run/bypass
- Test valves and control of valves
- Setup inserts at least one for spin-1/2 and one for spin-1 (NMR coils, sensors, cups)
- Set up monitors on PC for insert and fridge

# Microwave

- Setup microwave controls
- Setup automation and reading pol. From twist
- Calibration procedure with saved calibration even after power loss
- EIO safety interlock
- Send out damaged tube to CPI

# NMR

- Look at data taken for warm bench test: need ratio of areas
- Look at cold NMR test: compare LN2 to room temp.
- Get both UVA and LANL systems setup and ready to take data, with particular target insert
- Add cable length to cold NMR and test again
- Take more comparison data in collaboration with LANL on both cold and warm systems

# Sensors

- Need sensors for stick, so give Carlos at least two that will be calibrated separately
- Setup calibration procedure for the rest for taking data, make sure can still be readout with new setup
- Write a plan for the calibration with the amount of time needed for the calibration and the resources needed

# Material

- Know where the material is needed for cooldown: dewar, slot
- Should prepare for test loading and mock-cooldown
- Measure amount of material in the target cell (packing fraction)



# E1039 Systematic

- What are we trying to achieve and within what uncertainty
- What are the dominant sources:
  - Detector
  - Target
  - Time dependent