

Primary Tasks

Josh

- 1.) Microwave stepper setup, reliability/repeatability
- 2.) Microwave frequency calibration and reliability tests
- 3.) NMR (UVA system) and Microwave PS long cable length setup and tests
- 4.) Know all details of controlling VI, simulations and automation
- 5.) CPI power supply communication and remote controls VI and testing
- 6.) All microwave cabling and safety interlock setup and write-ups for FNAL electrical walk through
- 7.) Nitrogen Shield vessel Engineering Note

Zulkaida

- 1.) 1-D bar as Seppo suggested for better thermal simulation
- 2.) Completion of Quench simulations and write up
- 3.) VI (Must be LabView) for vacuum pressure (more important) and turbo controller (less important)
- 4.) Full analysis software for Sievers function extraction
- 5.) Testing magnet simulations and false asymmetries with cup/ladder/target variations
- 6.) Setup warning system and slow control variables to monitor for the magnet and vacuum
- 7.) Configuring all magnet and vacuum cabling and monitoring to cryo-platform

Carlos

- 1.) Finalize sensors and readouts for fridge and magnet (specifically outside magnet)
- 2.) Actuator controls and limit switches and positioning
- 3.) Design and submit material loading tub
- 4.) Leak check risers and vacuum space (or start whatever admin process we need to)
- 5.) Configuring all fridge and cryo cabling and monitoring to cryo-platform

Anchit

- 1.) Make NH₃ and ND₃ try to optimize procedure
- 2.) Calculate what the heat load from the microwave and the beam is on the beads
- 3.) Design and perform density (thermal contraction) measurement
- 4.) Make cryostat tops for making material and small sample polarizing with small SC magnet

Arthur

- 1.) Reproduce the COMPASS dynamic dilution factor using MCFM
- 2.) Produce the SpinQuest dynamic dilution factor using MCFM considering all materials
- 3.) Study variation of dilution factor experiment Q^2 , q_T and X_b

Liliet

- 1.) Analysis