

HDice Controls Meeting Minutes

11/17/2015

Present: Armit Yegneswaran, Xiangdong Wei, Peter Bonneau, Brian Eng, Mary Ann Antonioli, Amanda Hoebel, Tyler Lemon.

- **Hardware Status**

- RF Cable

- ▲ A test cable with “N” type connectors is being fabricated.
 - Due to supply issues in obtaining the proper fitting connectors, the ordered “N” type connectors are oversized for the diameter of the RF cable, hence an adapter is needed.
 - The first adapter that was fabricated was too small to assemble the cable.
 - A larger adapter is being fabricated.

- **Software Status**

- Rotation of Target Polarization Program

- ▲ In today’s meeting, a full rotation sequence the operation of the rotation of Target Polarization Program was demonstrated on the HDice Test Station.
 - In the demonstrated rotation sequence, the starting axial current was 15 [A].
 - Upon start of program in automatic mode, the user interface reported the status of the power supplies and gave the operator the choice to continue with the rotation or to abort the sequence.
 - The axial current was automatically lowered to the specified 10.2 [A] in preparation for the rotation.
 - While the axial current was held at 10.2 [A], the transverse supply was ramped to 68 [A].
 - Holding the transverse at 68 [A], the axial current was automatically lowered to -10.2 [A] followed by ramping down the transverse supply to 0 [A].
 - Upon reaching 0 [A] on the transverse supply, the axial supply was correctly ramped to -15 [A].
 - The wait times correctly held the sequencing at the pre-determined instances in the program.
 - Program interface correctly reported the status of the supplies and the progress of the rotation throughout the sequence.
 - The hold function for both axial and transverse was demonstrated and worked correctly was designed.
 - The program entered manual mode upon the completion of automatic rotation.
 - ▲ The test station is available for HDice group members to run test sequences and become more familiar with the operator interface.

- Mathematica analysis code

- ▲ The main NMR analysis code is failing due to an outdated library. A video teleconference meeting with Craig from BNL finally occurred on 11/17/15, three weeks after the teleconference on 10/27/15 during which he mentioned that he was sending a USB key. Still waiting to receive USB keys.

- Next meeting: The HDice Assessment meeting will be on Wednesday, December 2nd at 10:00 AM in DSG Control Room (EEL R121C).