DSG-HDice R&D Meeting Minutes

Date: September 18, 2020 Time: 11:00 AM – 12:00 PM

<u>Attendees</u>: Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, Tyler Lemon, Marc McMullen, Amrit Yegneswaran

- 1. VI for remote control of Oxford IPS 120 power supply
 - 1.1. Second VI added to fsNMR's LabVIEW project for control of a second Oxford IPS 120 power supply
 - 1.2. Discussed potential future addition to all NMR programs of the Oxford Mercury iPS power supply, a newer version of the Oxford IPS 120 power supply
- 2. Discussed averaging feature found on Zurich lock-in amplifier
 - 2.1. HDice group tried to upload a CSV file containing offline averaging results to lock-in amplifier to use as background; lock-in amplifier will not allow upload of HDF5 files that it does not create
 - 2.2. While running a test sweep, Tyler Lemon found a built-in feature of the lock-in amplifier that acquires and averages multiple samples at each step during the sweep
 - 2.2.1. Since resulting file is created by lock-in amplifier, the lock-in amplifier is able to read the file containing averaged data
- 3. Tyler Lemon and Peter Bonneau will review tasks and add details to schedule for Zurich lock-in amplifier-based fsNMR program development