

## NPS Collaborator's Meeting Minutes

**Date:** September 10, 2020

**Time:** 9:00AM – 10:00AM

*Attendees: Arshak Asaturyan, Vladimir Berdnikov, Marie Boer, Aaron Brown, Carlos Munoz-Camacho, Alexandre Camsonne, Chris Cuevas, Rolf Ent, Tanja Horn, Charles Hyde, Ho San Ko, Steven Lassiter, Hamlet Mkrтчyan, Jacob Murphy, Petr Stepanov, Vardan Tadevosyan, Hakob Voskanyan, Bogdan Wojtsekhowski, Stephen Wood*

### 1. Detector Frame Assembly (Carlos Munoz-Camacho)

- 1.1. Dry run of detector assembly in progress
  - 1.1.1. Testing cooling system and chillers

### 2. Cable Fabrication and HV Rating Concerns (Aaron Brown, Chris Cuevas, Stephen Wood)

- 2.1. Fabricated 750 of 1100 divider cables
- 2.2. Confirmed operating voltage range of 800 V to 900 V for PMTs
- 2.3. To ensure cables and circuit boards can withstand operating voltage, tests will be conducted on-site
  - 2.3.1. Stephen Wood suggested testing the full high voltage chain to destruction as a means of determining if the components can withstand operating voltage
- 2.4. Aaron Brown will send the specs sheet for the RG 174 cable that details the UL rating, as well as the non-UL rating, to Stephen Wood
- 2.5. Documentation on voltage ratings and safe usage will be added to safety documents before experiment begins

### 3. Interlocks

- 3.1. Exposed wiring points (touch points) have been identified
- 3.2. Interlocks will be needed to ensure that voltage is off during accesses for detector maintenance
- 3.3. Researching radiation hard temperature and humidity sensors
  - 3.3.1. Tanja Horn will provide information on expected radiation levels
  - 3.3.2. Carlos Munoz-Camacho is planning to use PT100 temperature sensors in the crystal zone; wants to know if these sensors will be okay