

## NPS Collaboration Meeting Minutes

**Date:** September 30, 2021

**Time:** 09:00AM – 10:15AM

*Attendees: Arshak Asaturyan, Fernando Barbosa, Vladimir Berdnikov, Marie Boer, Aaron Brown, Alexandre Camsonne, Rolf Ent, Tanja Horn, Charles Hyde, Paulo Medeiros, Hamlet Mkrtychyan, Carlos Munoz, Emanuel Rindell, Julie Roche, Brad Sawatzky, Vardan Tadevosyan, Bogdan Wojtsekhowski, and Stephen Wood*

### 1. High Voltage Dividers

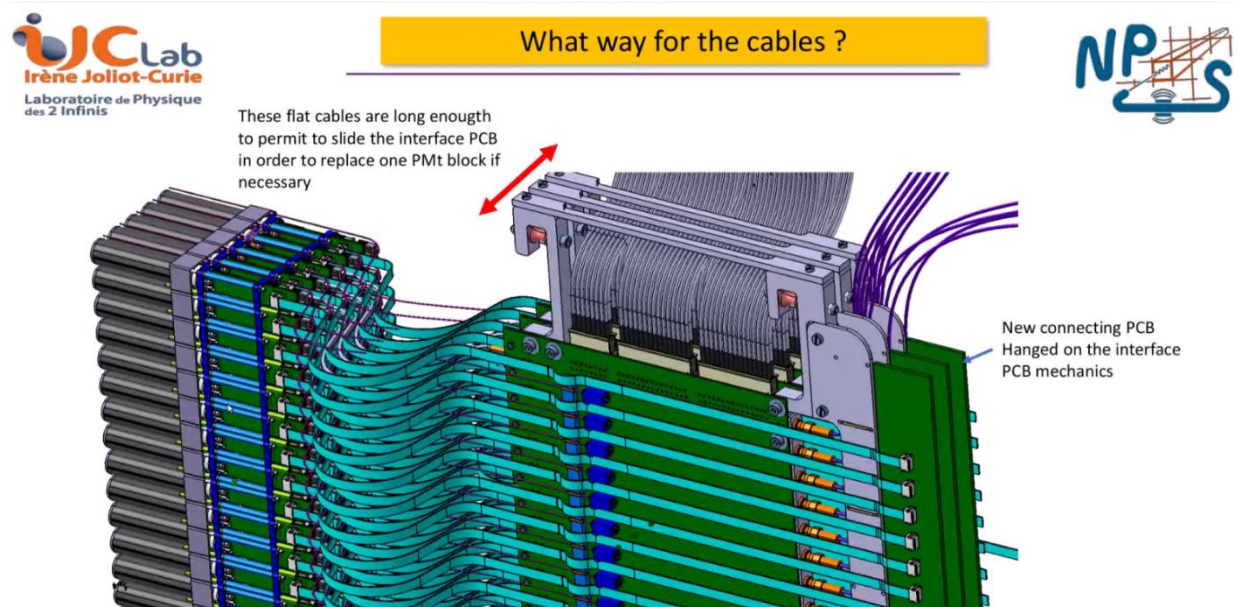
*Fernando Barbosa*

1. Performed tests to determine source of baseline noise – source of noise most likely the dark box used during testing

### 2. Low Voltage Cabling/Grounding

*Carlos Munoz, Emanuel Rindell*

1. Additional PCB with flat cables is the best option to provide low voltage to high voltage divider PCB amplifiers – no daisy chaining



Screenshot of low voltage cabling solution with individual flat cables and additional PCBs

2. Discussed options for grounding between the mu metal tubes that house the PMTs and the aluminum PMT support block
3. An overall Hall grounding diagram will be developed

### 3. DSG Update

*Aaron Brown*

1. Presented [NPS Collaborators' Meeting](#) DSG Update
  - Reviewed simulations done with 3x3 block of  $\text{PbWO}_4$  crystals with carbon fiber and mu metal dividers and heat loads of 0 W and 3.5 W

- Discussed reasons temperature profiles for front and back of crystals are similar
- Majority of heat is dissipated within the first 2 cm of crystal length
- Discussed the importance of crystal temperature stability over temperature uniformity – slight temperature variation along length of crystal is acceptable

4. [Next meeting: 2021/10/28](#)