

NPS Collaboration Meeting Minutes

Date: August 26, 2021

Time: 09:00AM – 10:10AM

Attendees: Tristan Anderson, Arshak Asaturyan, Vladimir Berdnikov, Marie Boer, Aaron Brown, Rolf Ent, Tanja Horn, Charles Hyde, Steven Lassiter, Paulo Medeiros, Hamlet Mkrtyan, Carlos Munoz, Julie Roche, Brad Sawatzky, Vardan Tadevosyan, Hakob Voskanyan, Bogdan Wojtsekhowski, Stephen Wood, and Carlos Yero

1. Low Voltage Cables

Carlos Munoz

1. Presented [options for routing low voltage cables](#) for the amplifiers on the high voltage dividers on the PMT base
 - Fernando Barbosa recommended daisy chaining no more than eight high voltage divider PCBs
2. Discussed connector size issues due to space limitations within detector frame and concerns about detector maintenance
 - Bogdan Wojtsekhowski suggested thinner connectors that could work for new high voltage divider design

2. DSG Update

Aaron Brown

1. Presented [NPS Collaborators' Meeting](#) DSG Update
2. Discussed adding a “Do Not Touch” sign, as well as placing a black mark to indicate required switch position, on CAEN high voltage crate near interlock switch
3. Discussed radiation hardness of remote power controllers for chillers
 - Specifications of controller components indicate that there should be no damage due to radiation
 - Controllers can be placed in detector hut if necessary
 - Brad Sawatzky suggested purchasing spare controllers
4. Reviewed Ansys thermal analysis of 36x30 array of PbWO₄ crystals with 1.2 cm Cu shell
 - Rolf Ent suggested simulating heat flow across the crystals as well as down the length of the crystals
 - Carlos Munoz recommended taking air flow into account for future simulations

3. Next meeting: 2021/09/09