

DSG-Ansys R&D Meeting Minutes

Date: January 20, 2022

Time: 14:00 to 14:30

Attendees: Aaron Brown, Pablo Campero, Brian Eng, and Tyler Lemon

1. NPS thermal analysis

Aaron Brown, and Brian Eng

1. Able to extract 2160 temperature measurements for 1080 crystals in a single text file
 - Took two measurements per each crystal (front and rear faces)
 - Data is extracted as string type; noticed some non-recognized characters
 - Extracted data consists of the measurement number, time, and temperature value
2. Found issues with the headers generated in the text file
 - Two headers per each measurement were generated
 - Brian Eng will check the code utilized to extract data from Ansys

2. EIC beryllium section

Pablo Campero, and Brian Eng

1. Ansys SpaceClaim licenses issues were resolved after re-installation of the patch
 - Licenses availability was tested
 - Able to open model that includes beryllium pipe, silicon sensor, and enclosure
 - Flow simulation for the model will continue using model in Ansys Fluid Flow CFX
2. Hand calculation of the temperature in silicon sensor in progress; will be compared with Ansys thermal results
 - Temperature is 93.3 using actual dimension and requested conditions for the model
 - Will repeat calculation, varying the separation length between beryllium pipe and silicon sensor