## DSG Ansys R&D Meeting

## Date: May 11, 2023 Time: 2:00 PM – 2:30 PM

Attendees: Pablo Campero, Brian Eng, Marc McMullen, and Tyler Lemon

## 1. EIC beampipe test stand thermal analysis

- Pablo Campero, Brian Eng, and Marc McMullen
  - 1. Generated 3D model in SpaceClaim
    - Includes 1-mm aerogel surrounding the beampipe
    - Added four, <sup>1</sup>/<sub>4</sub>-inch connectors to supply air in the same way as the test stand assembly
    - Extended length of each component from 12 to 18 inches
    - Added a cap to the inlet end
  - 2. Ran first simulation, but results for temperature in the components were incorrect
    - Checked configurations for Ansys Fluent
    - Modifying geometry for the air inlet connectors to make sure each goes all the way through the annulus space
  - 3. Discussed air flow conditions and temperature measurements of the test stand
    - Identified sensor locations in test stand so probes in Fluent can be placed in the same locations