

DSG-Ansys R&D Meeting Minutes

Date: July 21, 2022

Time: 14:00 to 15:00

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

1. NPS thermal analysis

Pablo Campero and Brian Eng

1. Discussed simulation results for a model with only one fan and no heat applied
 - Ran simulation with rotation coordinates at $x=0$, $y=-1$, and $z=0$ and at 1600 rpm
 - From the simulation plots, observed that the fan is rotating in the CW direction and the air is pushed to the region above the electronic volume
 - Had floating point exception error when more than 50 iterations were run
 - Noticed that residuals are not converging as expected
 - Agreed to reduce element size of the mesh in the rotating domain volume to allow a better visualization of the velocity vector plot required to determine if the rotation is correct