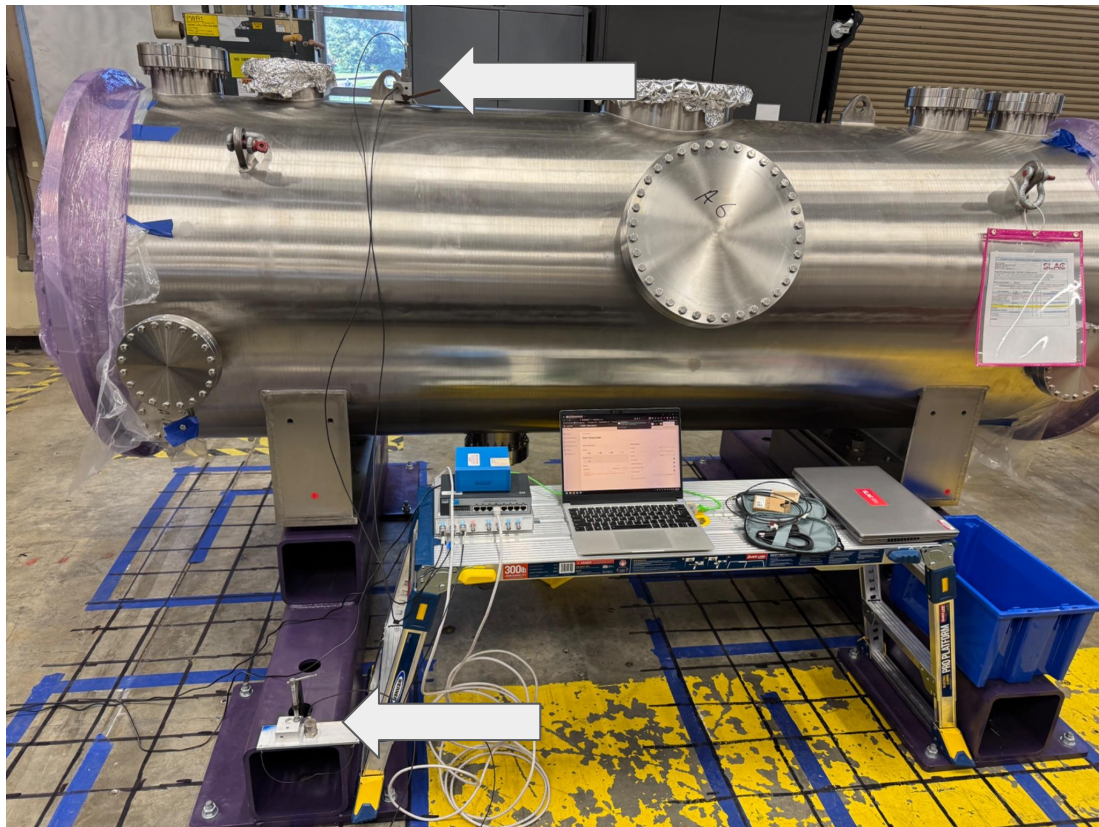


QCM Vibrations Testing

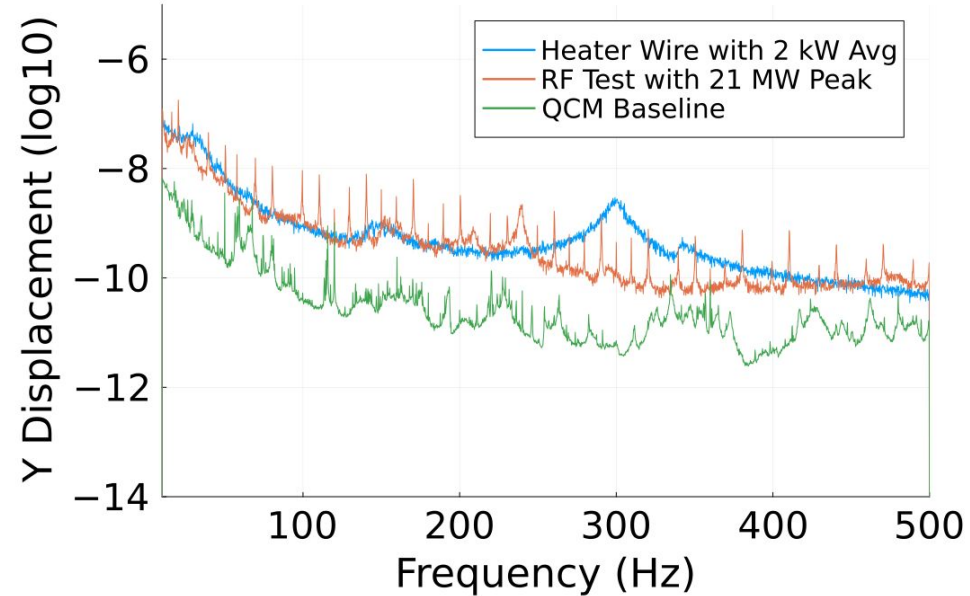
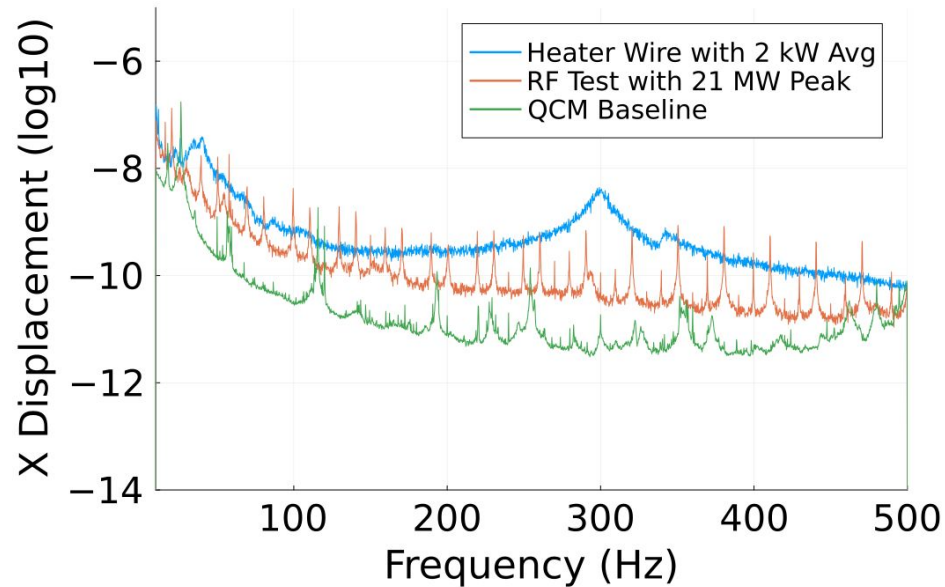
Ankur Dhar, Phia Morton

Setup in Klystron Test Lab

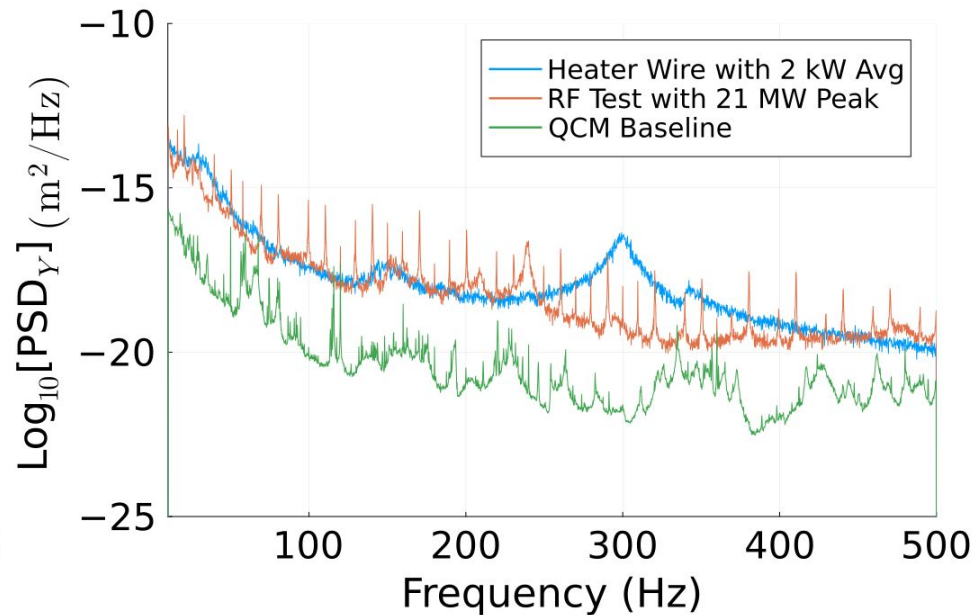
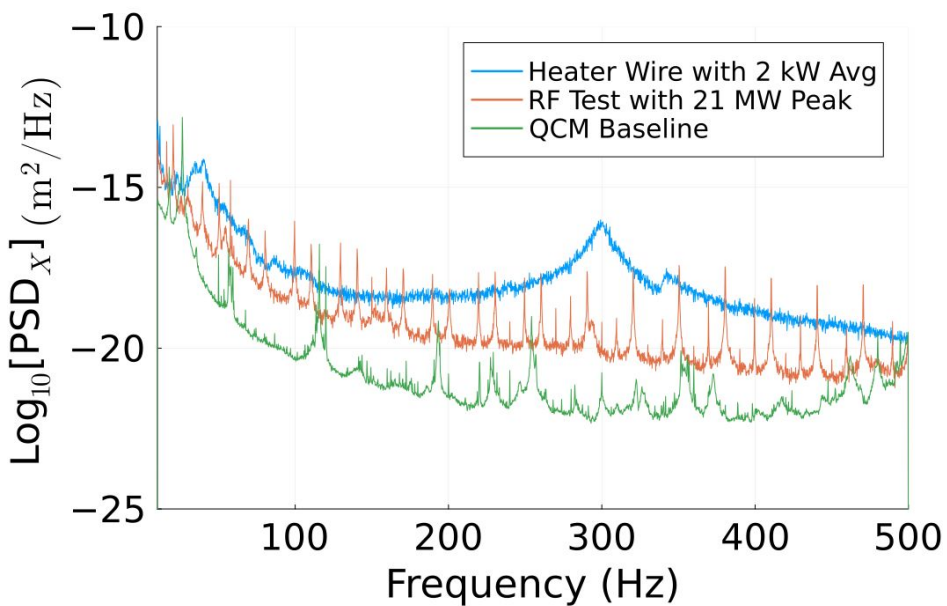


Displacement Spectra

Accelerometer data is filtered in frequency space between 5-500 Hz and double integrated. Ten minutes of data was divided into 5 second samples for averaging.

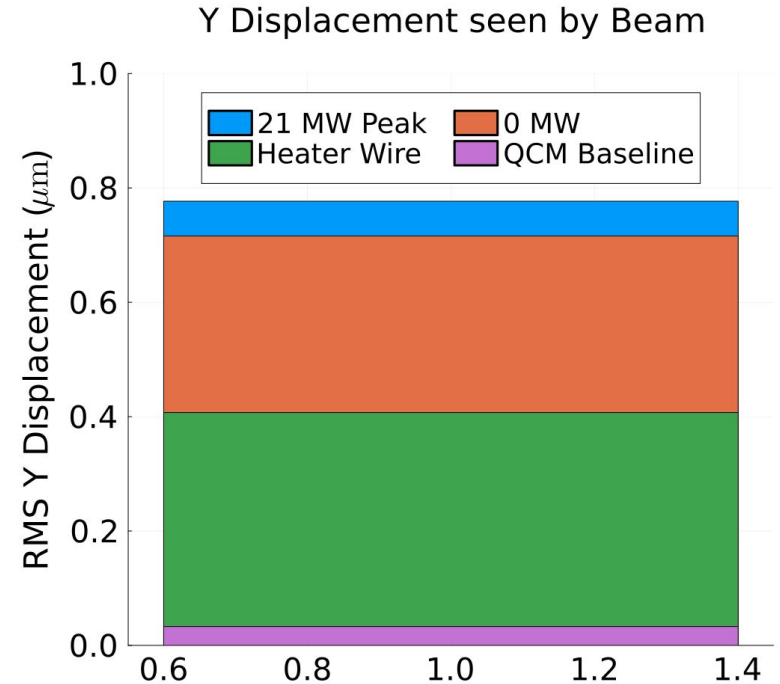
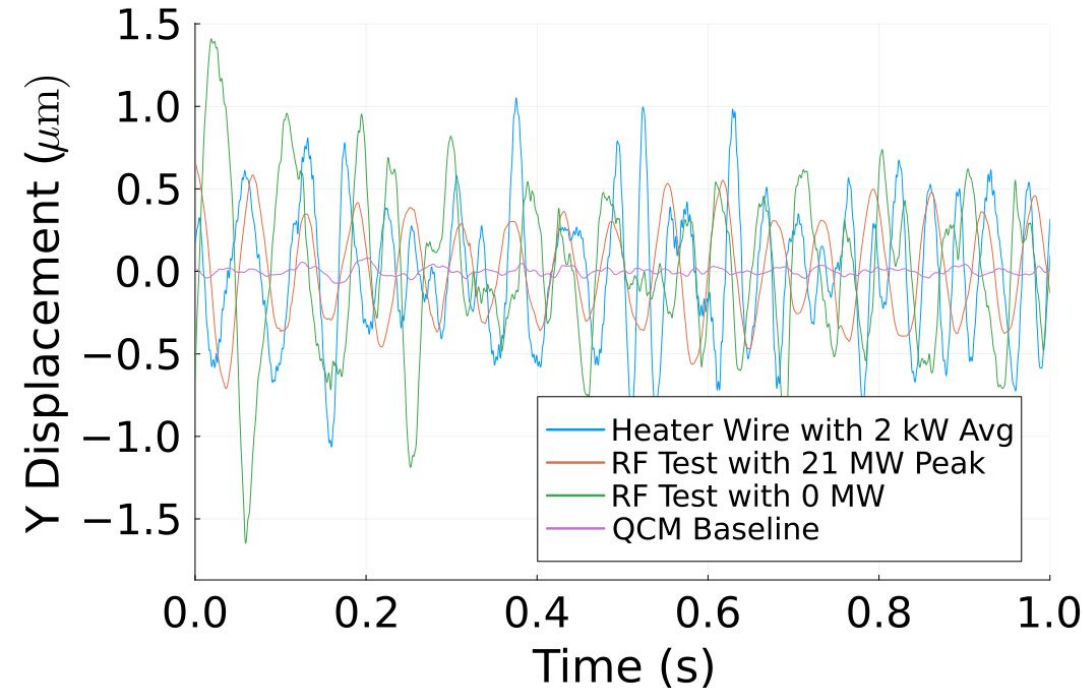


Displacement Spectral Density



Y Displacement over One Second

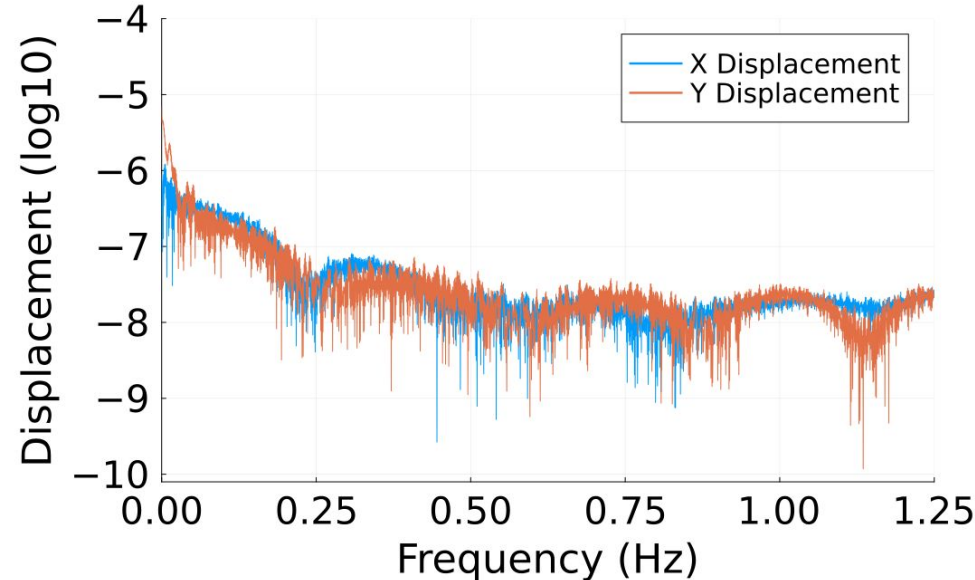
Baseline measurement far below any real-world testing scenarios



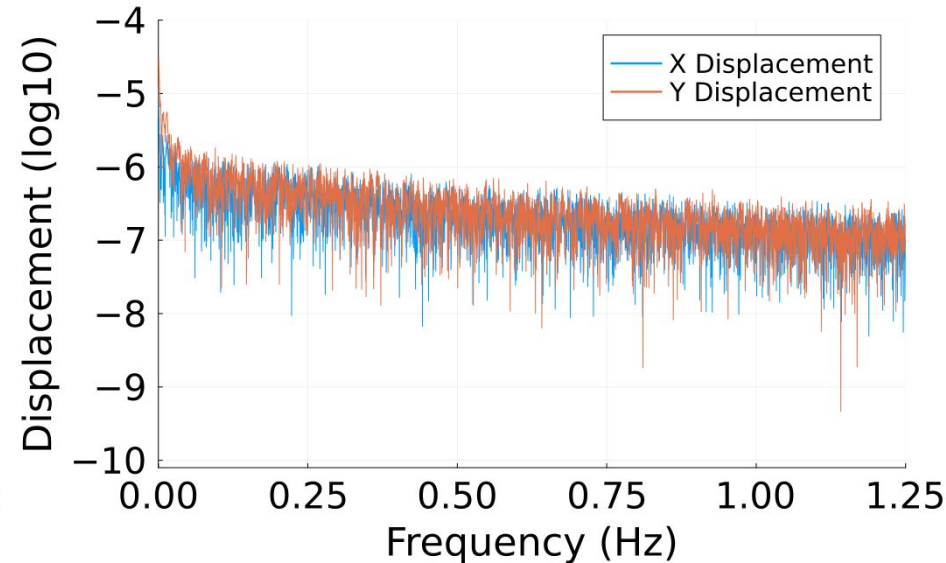
Rasnik Measurement Displacement Spectra

Rasnik measurements were conducted within a smaller test vessel using a single camera laser system. Cryogenic measurements were taken over 1 hour.

Rasnik Measurement In Air



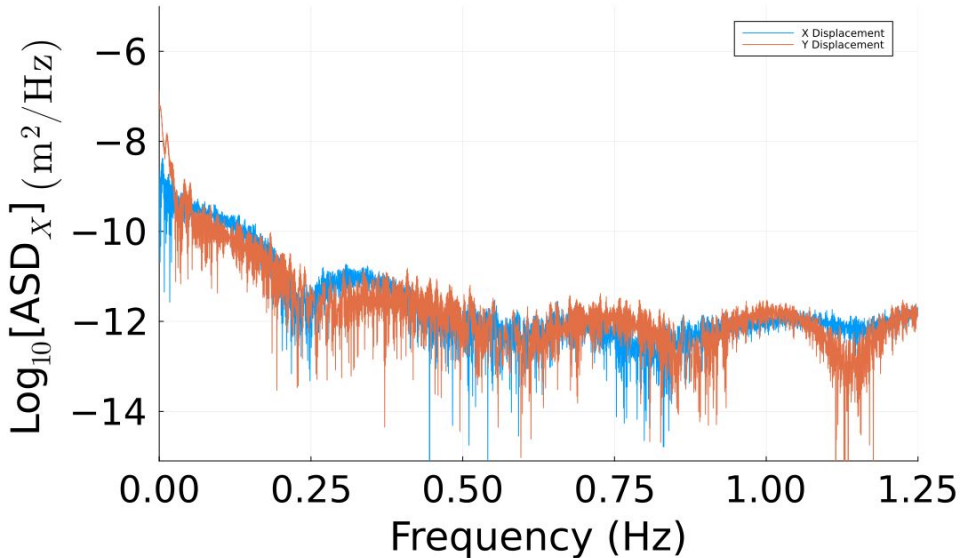
Rasnik Measurement In Liquid Nitrogen



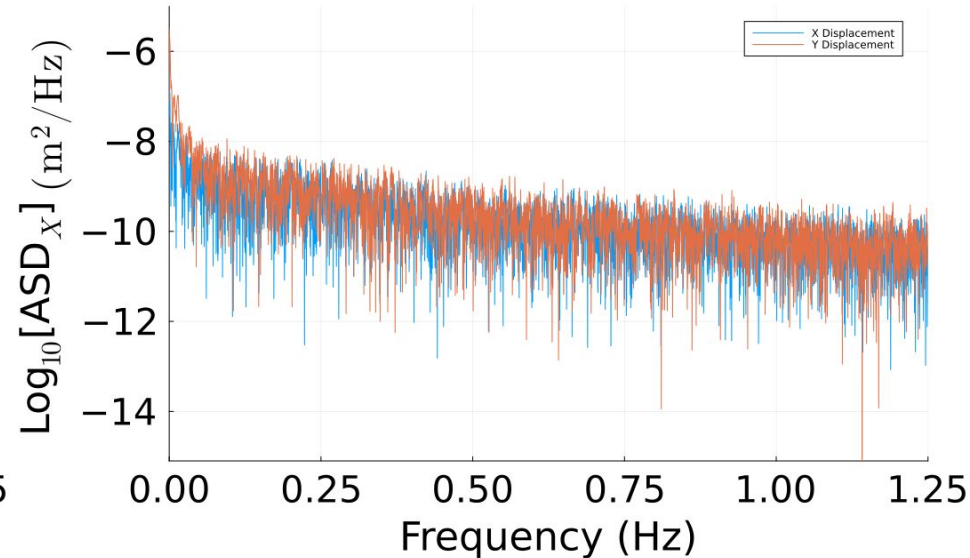
Rasnik Measurement Displacement Spectral Density

Rasnik measurements were conducted within a smaller test vessel using a single camera laser system. Cryogenic measurements were taken over 1 hour.

Rasnik Measurement In Air

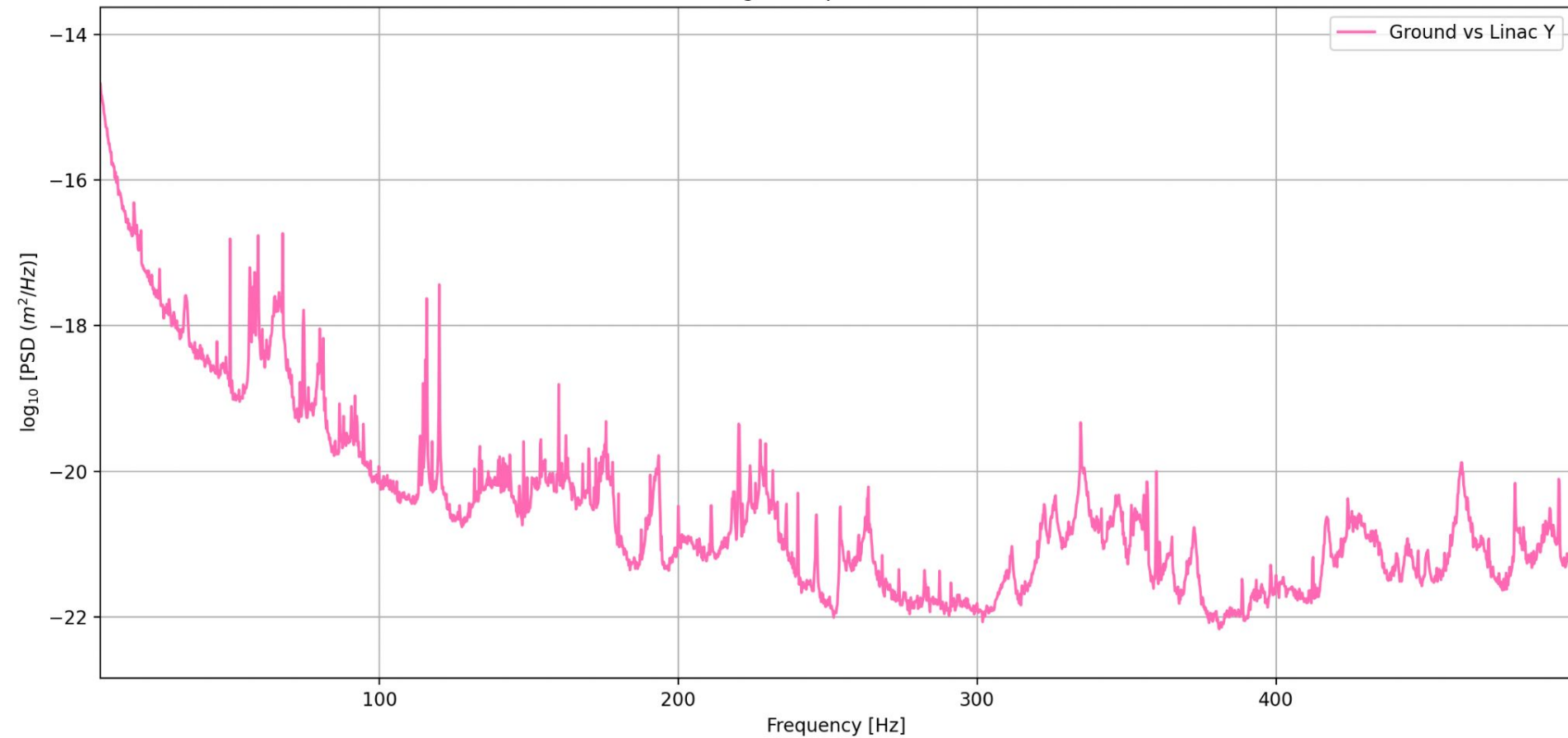


Rasnik Measurement In Liquid Nitrogen

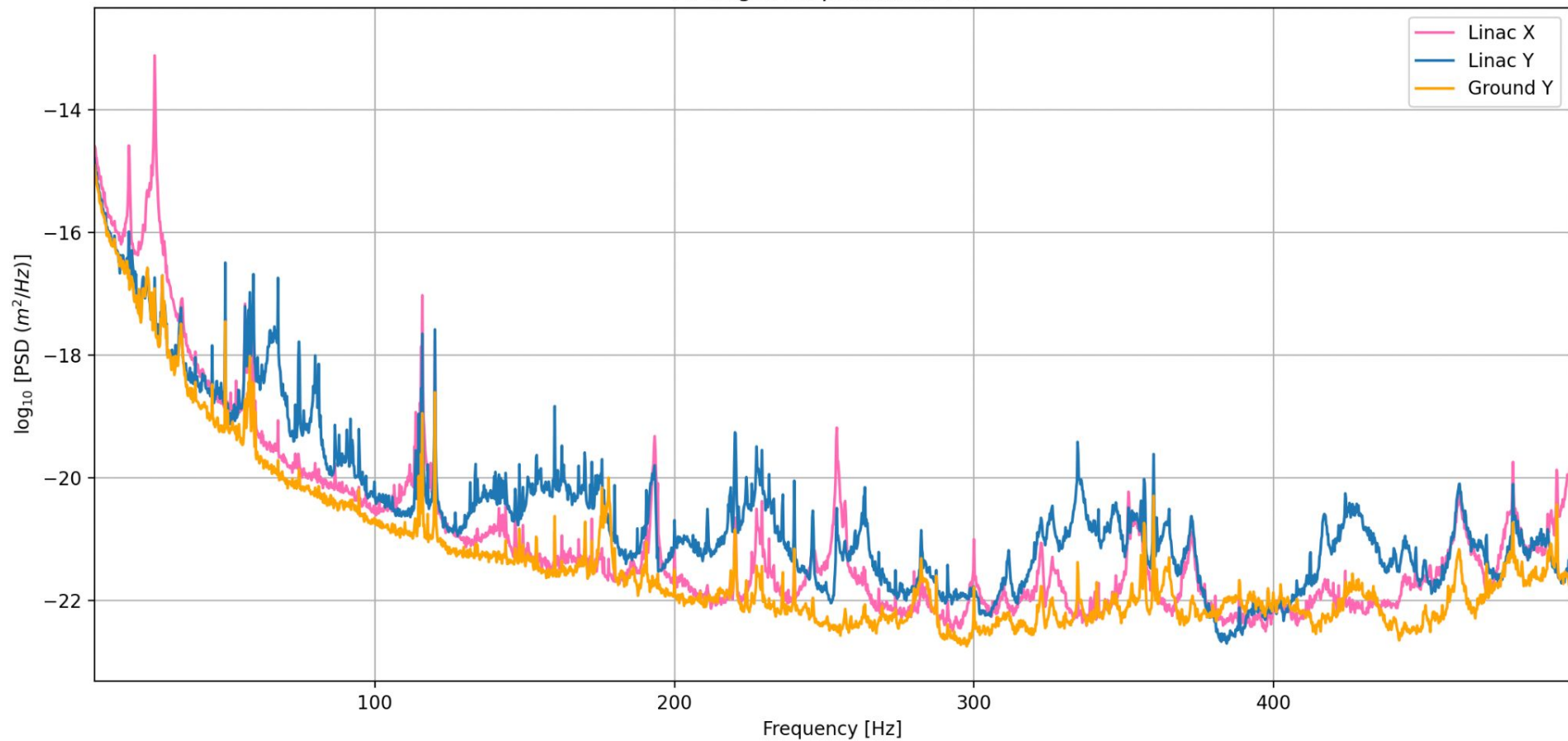


Backup

Averaged Displacement PSD



Averaged Displacement PSD



Displacement

