

NASA visit:

- Plan to arrive Thursday evening, have meetings on Friday morning, leave Friday evening.
- Rent a single van.
- Trip planned for April, either 1st, 2nd, or 3rd week of April depending on NASA availability.

Title for NASA forms: mm-wave dispersion for near space engineering

Mechanical:

- Cold chamber should be usable this semester.
- Will have to figure out how to secure microstrip line to eliminate unwanted movement.

Electrical:

- Source:
 - Haven't been able to find a voltage source that can supply 60 GHz.
 - However, we should be able to use a VCO, have found one that is ~ \$50 that can supply 28-36 GHz.
- Microstrip:
 - Proving difficult to relate the effective permittivity to the permittivity of free space. All equations found use only effective permittivity, there is however no equations that we can find to relate it to free space.
 - Should be able to if we do not have a substrate and simply have a wire over a ground plane separated by a gap of air.