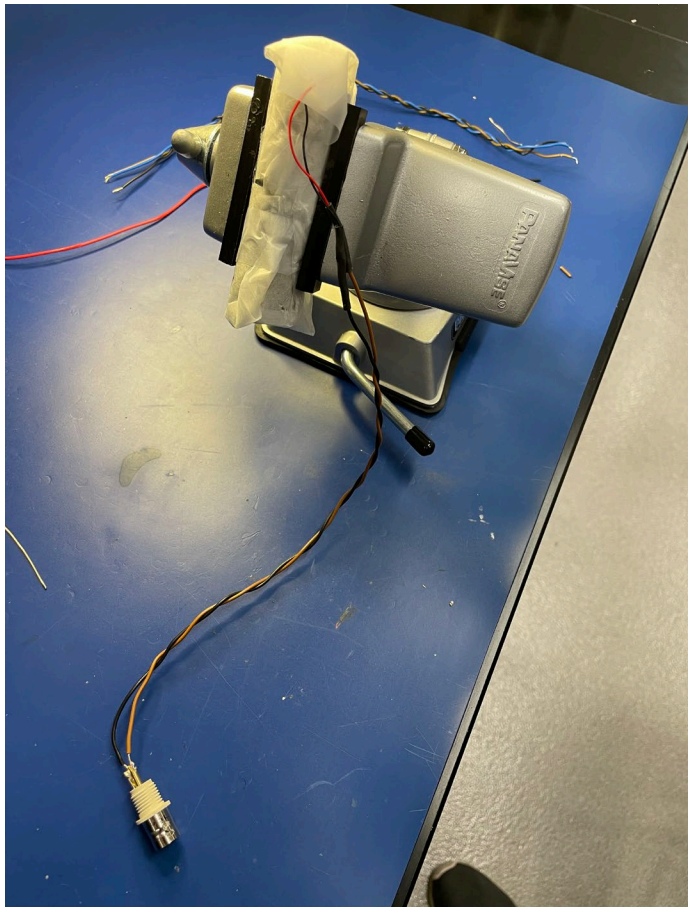
Optical Cavity for Raman Laser

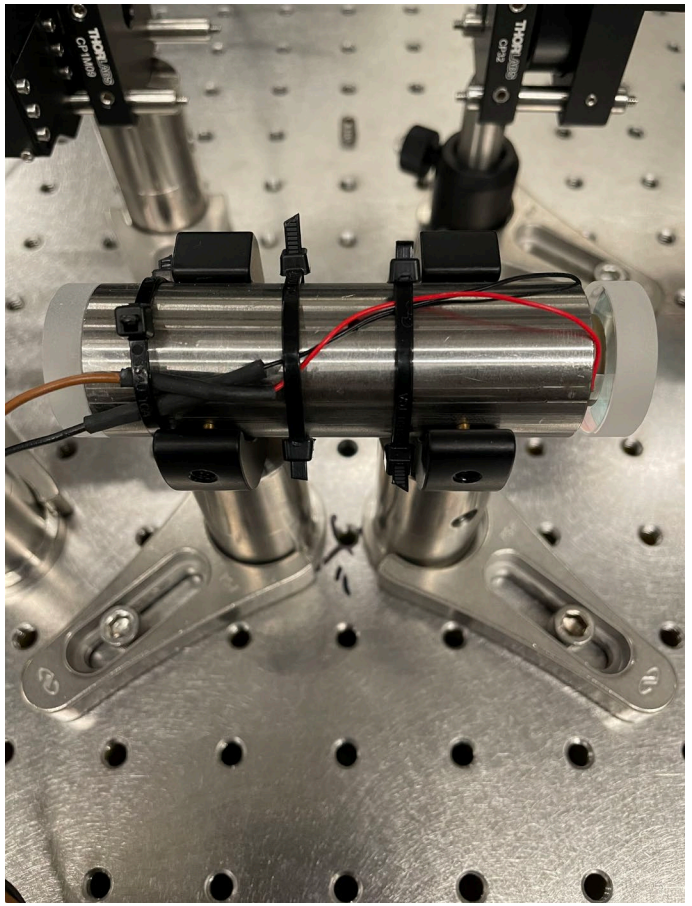
Jalen Crutchfield

Advisor: Grant Biedermann

Optical Cavity

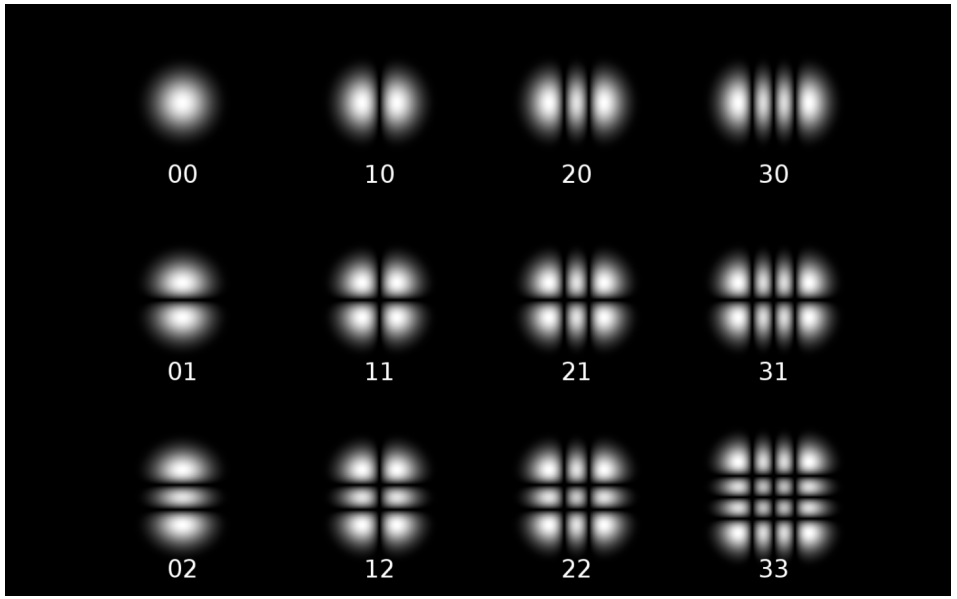
- Produces standing waves for different resonance frequencies
- Standing wave patterns produce transverse modes





Transverse Modes

- An electromagnetic field pattern
- Referred to as Transverse Electromagnetic Mode (TEM_{mn})
- Change due to different frequencies and have different intensity patterns



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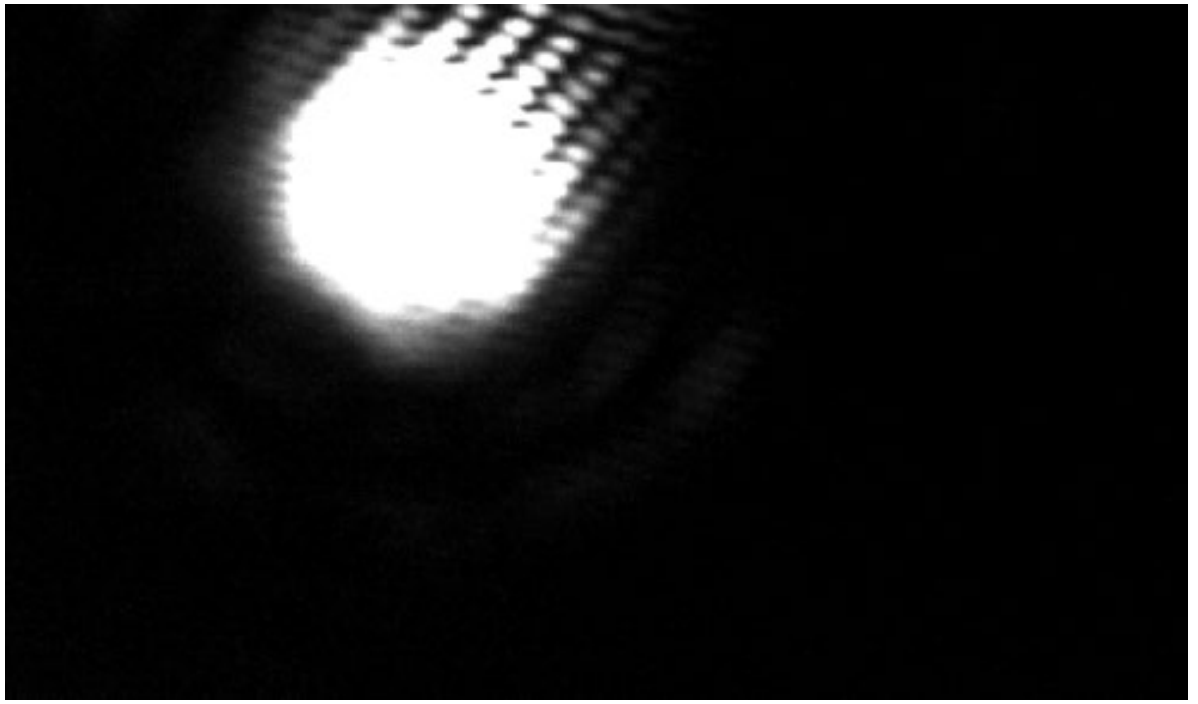
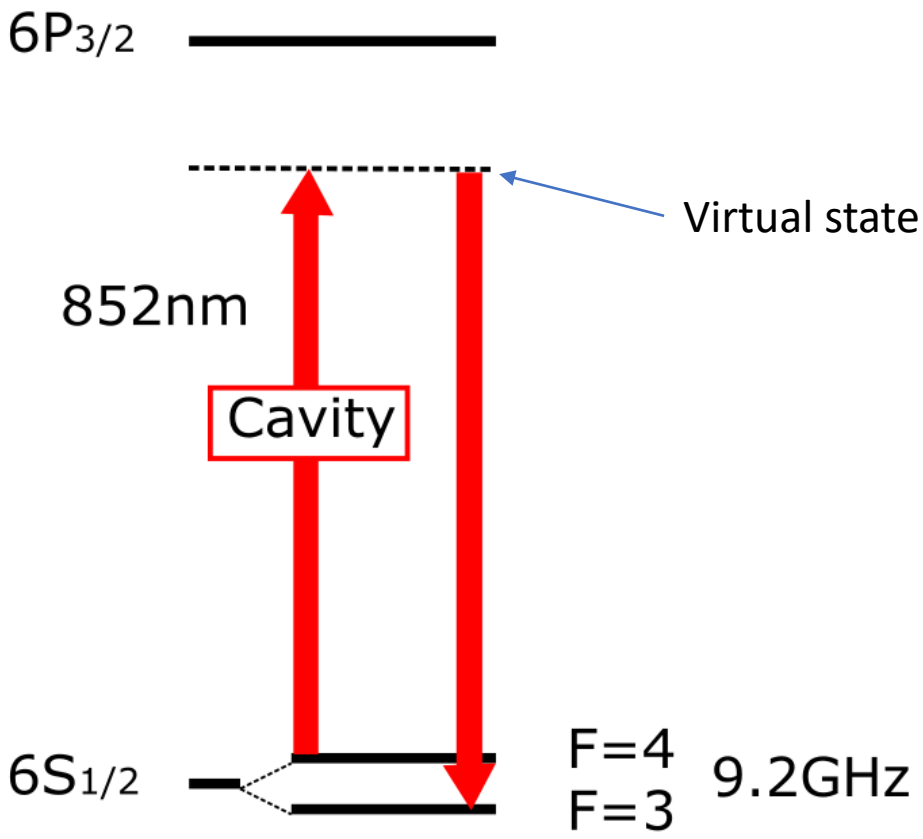
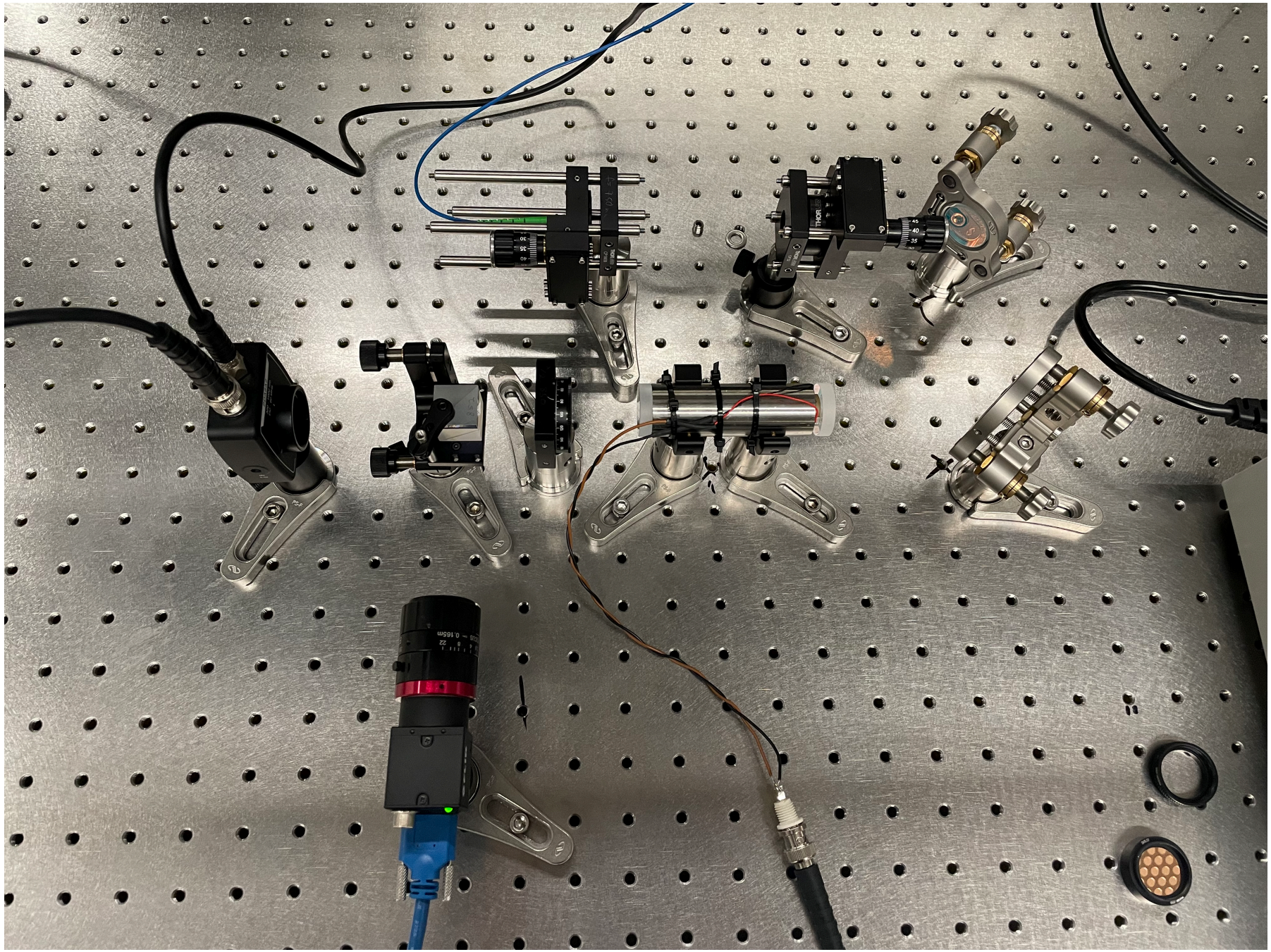


Research Goals

- Preparing cavity for Raman laser system





Current Work

- Photodiode readings on oscilloscope