**Science Case**

For my final project, I have two ideas in mind.

1. Similar to my GRFP, with the 25 objects we’re aiming to observe, we can confirm if the galaxy is an AGN by observing the AGN variability.
2. Similar to my undergraduate research, perform multi-band imaging to search for galaxies surrounding a long and opaque quasar trough in order to test different models of reionization by mapping the large-scale density field.

Both are possible by imaging with NOIRlab facilities. But I’m not exactly sure which one I should do.