AO7\_NOAO2\_Polans2015\_6\_0.05\_0.00\_61\_30\_mono\_1.00\_conventional\_2.0\_0.0\_0.005000\_2\_renderMatrix\_0\_0\_1\_0\_nonoise\_0

3.4Arcmin\_stimCenter\_3.4Arcmin\_renderCenter

regionVariant\_v1\_v1\_v1\_1.00

regionProps\_0.67L\_0.67L\_0.15S\_0.07S\_0.07S

bgColor\_0.0889\_0.0889\_0.0889\_stimSeriesVariant\_1\_ stimPosition\_31\_31

**stimCenterPropL\_0.00**

**stimColor\_0.0000\_0.1049\_0.0005**

**...**

**...**

**summaryFigs**

Parallel scheme for render matrices. Add \_renderCenter to the size directory name to match

**CHR**

1) Immediate surround size exposed in top level script

[DONE BUT NEEDS TESTING]

2) Averaging over pixels in recon image summary montage figures, so they look spatially uniform and match to the EW quantification.

[INFRASTRUCTURE ESTABLISHED BUT NEEDS MORE WORK AND TESTING]

3) Average results over multiple variants, particularly center variants

[INFRASTRUCTURE ESTABLISHED BUT NEEDS MORE WORK AND TESTING]

4) Fix render matrix summary that lets us look at actually acheived proportions for each mosaic

[DONE BUT NEEDS TESTING]

5) Redo naming hierarchy as above and better rationalize code

6) Separate size specified for building render matrices from size specified for stimulus. There is currently a separate variable for this for the render matrices in prBase, but it is just assigned to the stimulus size and then not used at all.

[CARLOS SAYS THIS IS EASY]

**DHB**

1) Carefully review stimulus specification and optimize match to what Will has revealed about the stimulus, including background

2) Coordinate 1 with ISETBioCSFGenerator approach

**SCIENCE**

1) Explore size for fixed mosaic ratios as in Max's paper

2) Think about regularization parameter effect

3) Think about effect of far and immediate surround, etc.

4) Understand whether/why background of stimulus affects center recon

5) Try to understand why recon is so red for mosaic with no L cones.

6) Will and Max's experiments are foveal. No S cones. And different cone density which we could probably spoof at 2 deg.

7) How do recons depend on SNR, and in particular as it is influenced by modeled (and experimental) stimulus duration

**CHR's SCHEDULE**

**Fall 2024.** Classes but not completely hopeless to work on the project.

**Spring 2024.** Total pumpkin.