

The spatial scale of chromatic processing of macaque V1 receptive fields at the center-of-gaze

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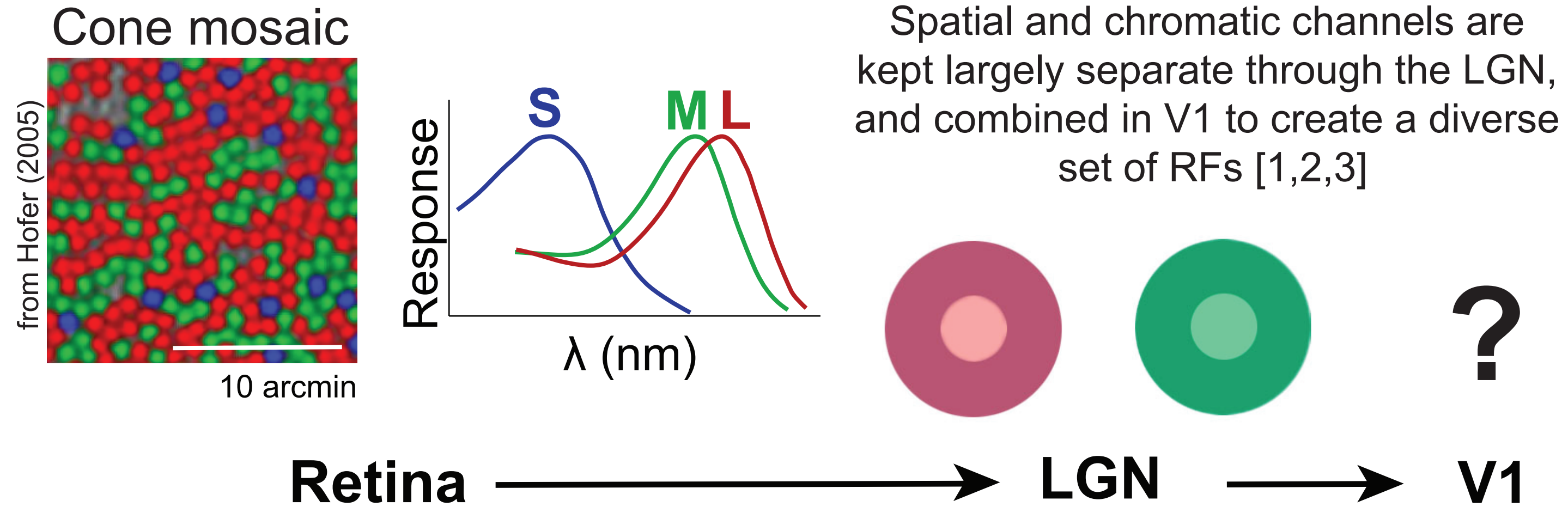
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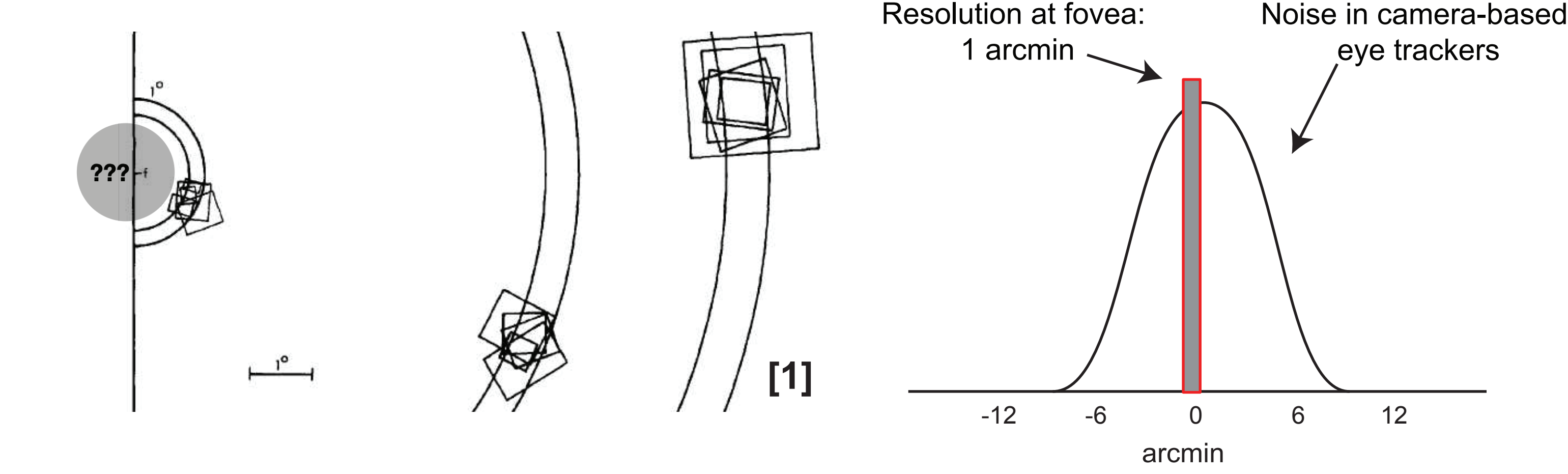
Background

How does cortex process high-acuity vision?

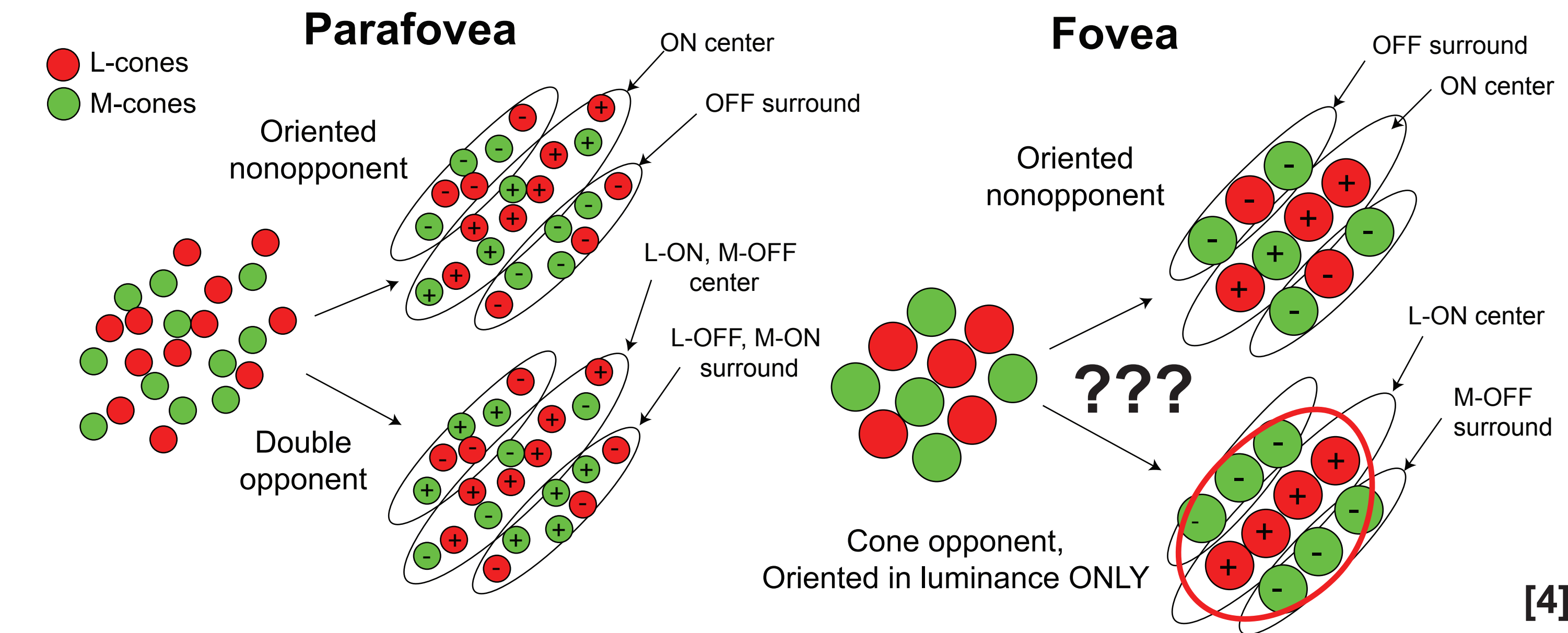
High-acuity vision occurs at the fovea, in the center 1° of visual angle. Pre-cortical circuitry processes inputs at cone resolution (1 arcmin or 1/60°)



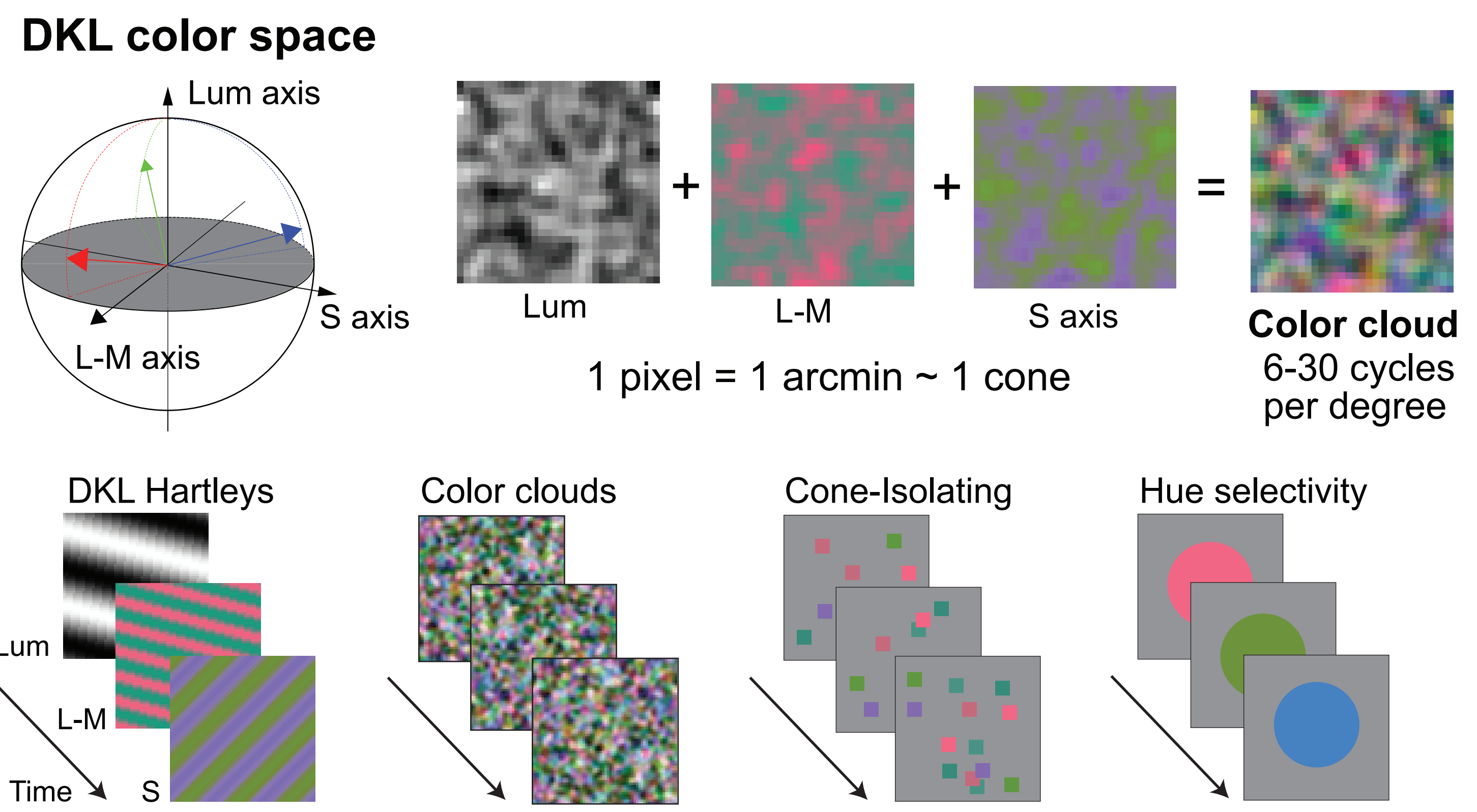
Foveal V1 is largely unstudied



Is spatial and chromatic information combined at the same scale in foveal V1?



Spatio-chromatic stimuli

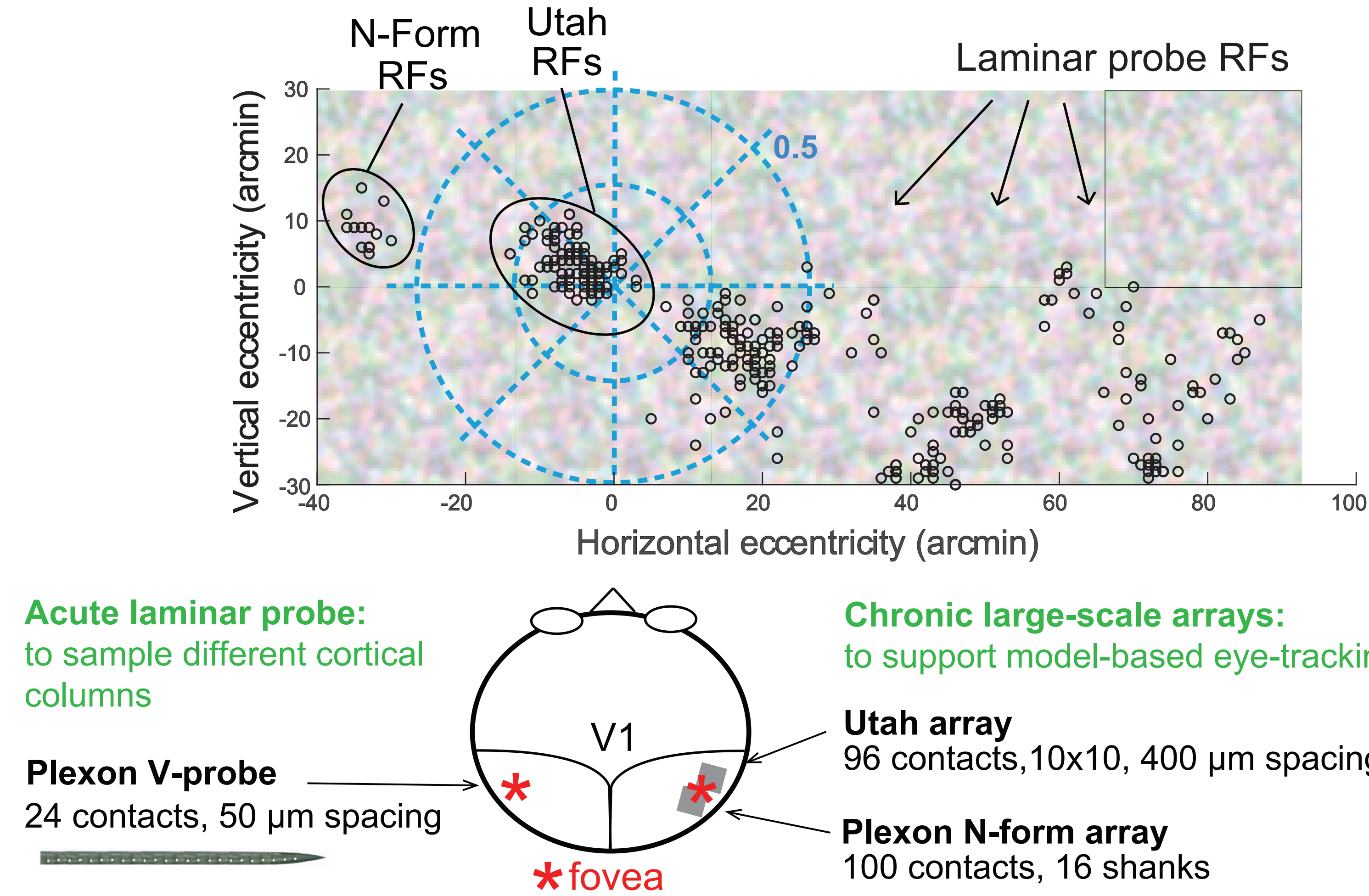


References

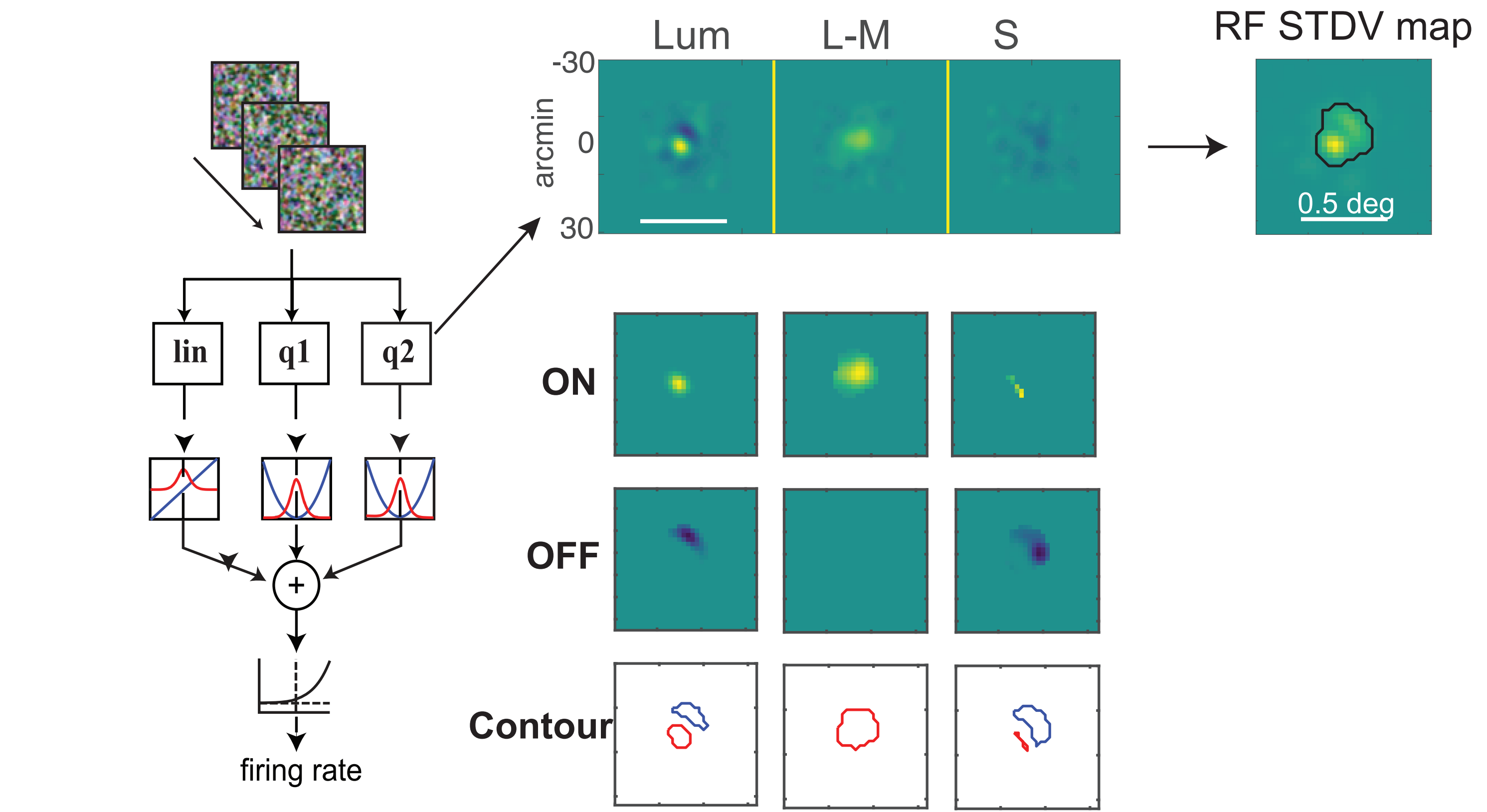
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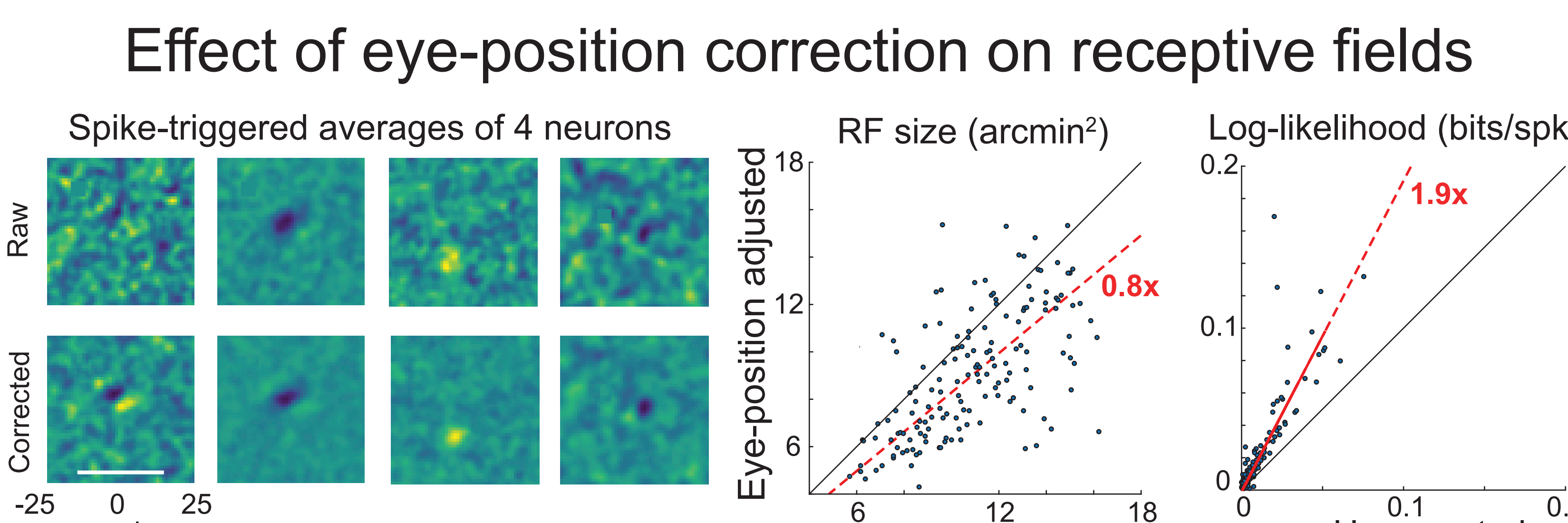
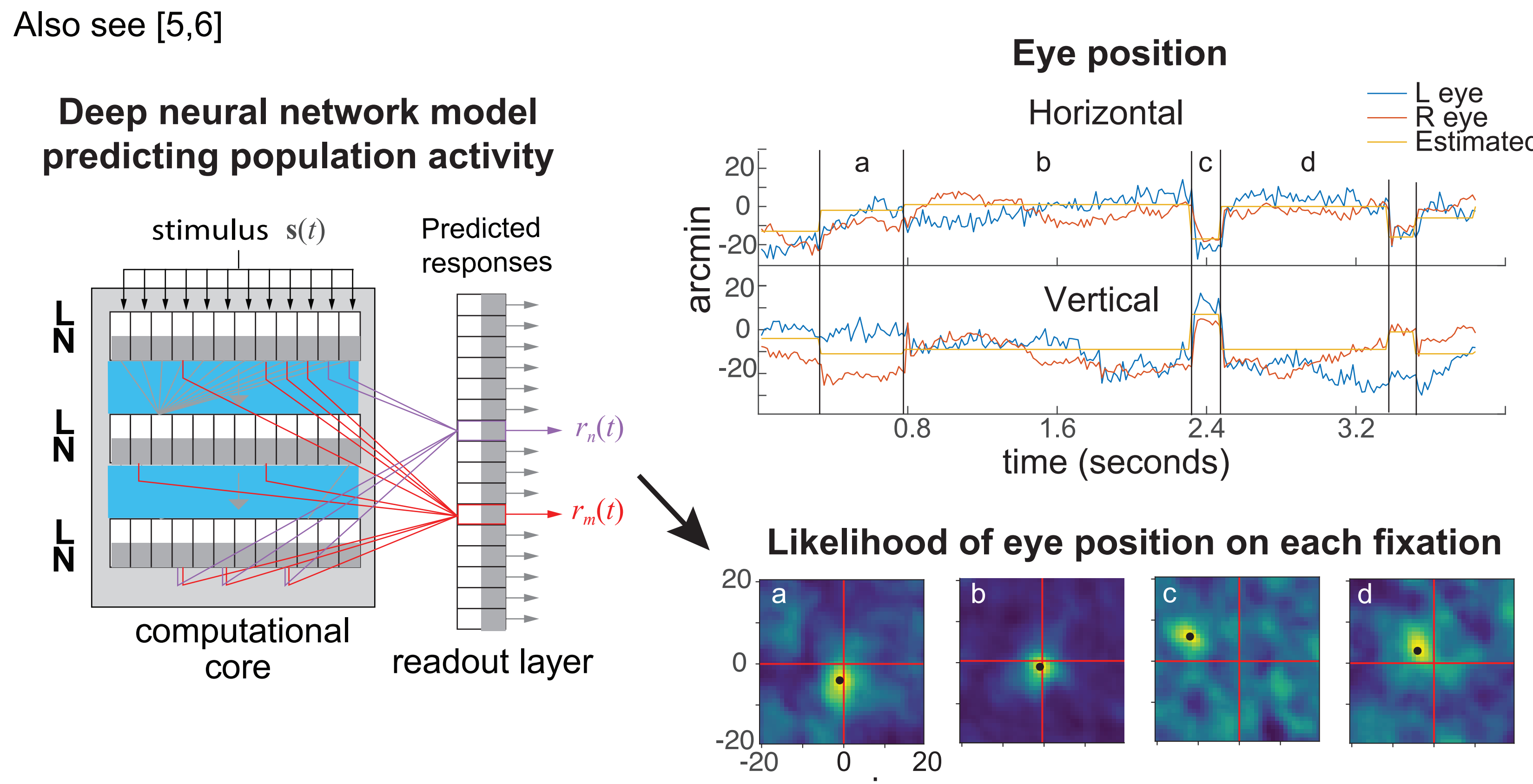
Large-scale recordings from foveal V1



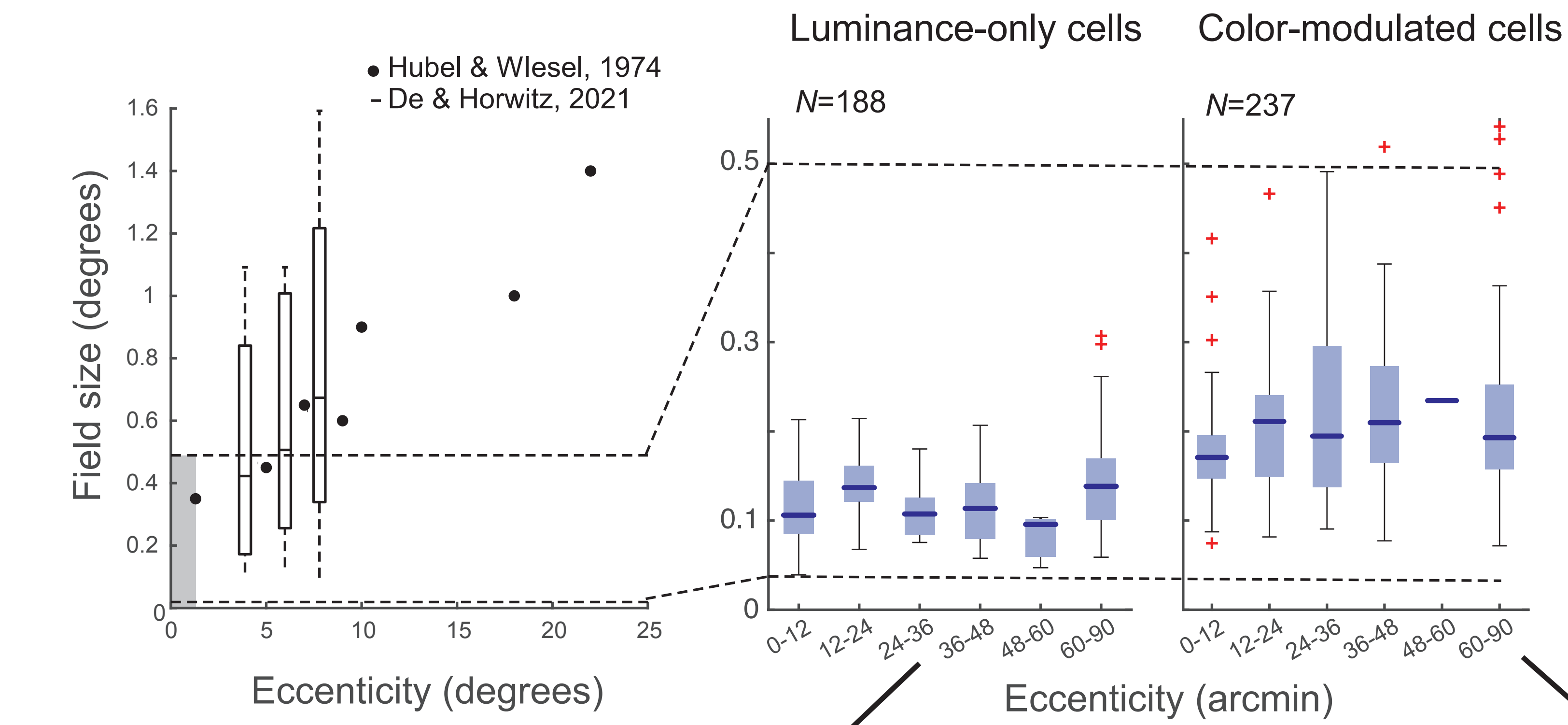
Model-based characterization of selectivity



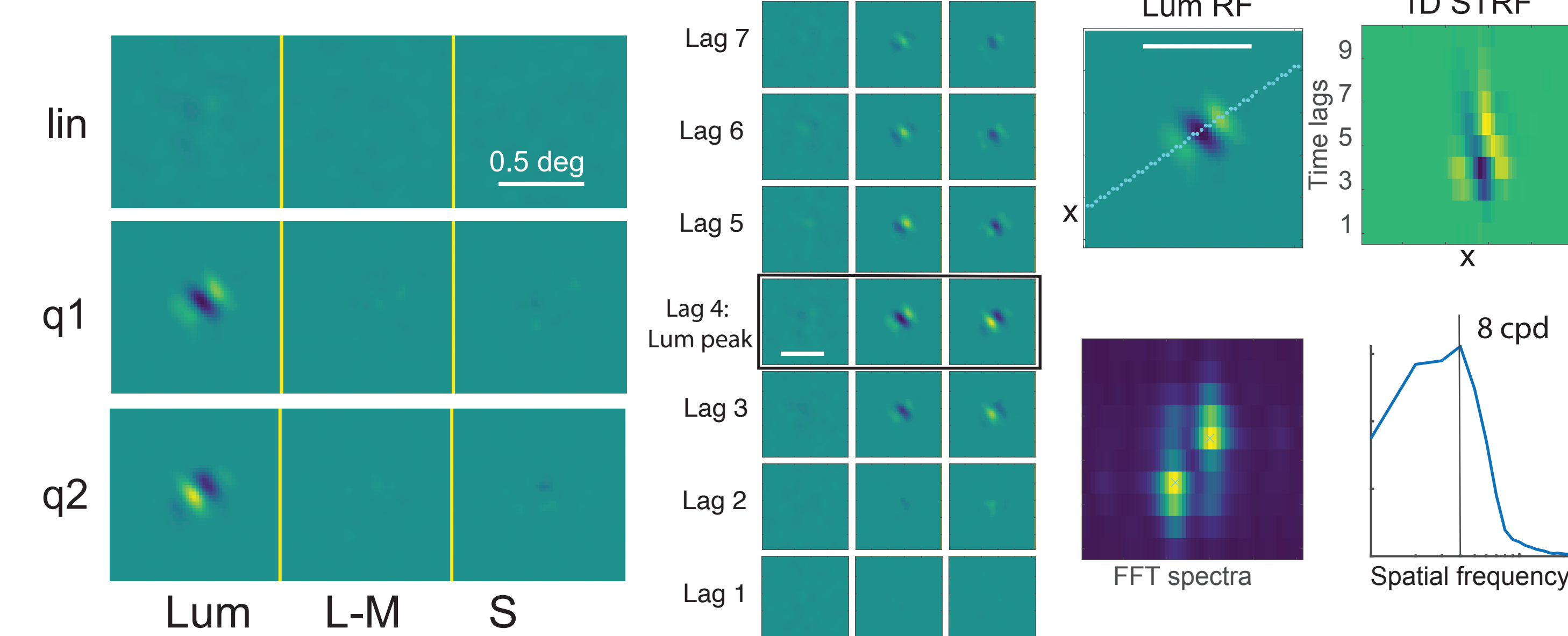
Neurophysiological eye tracking



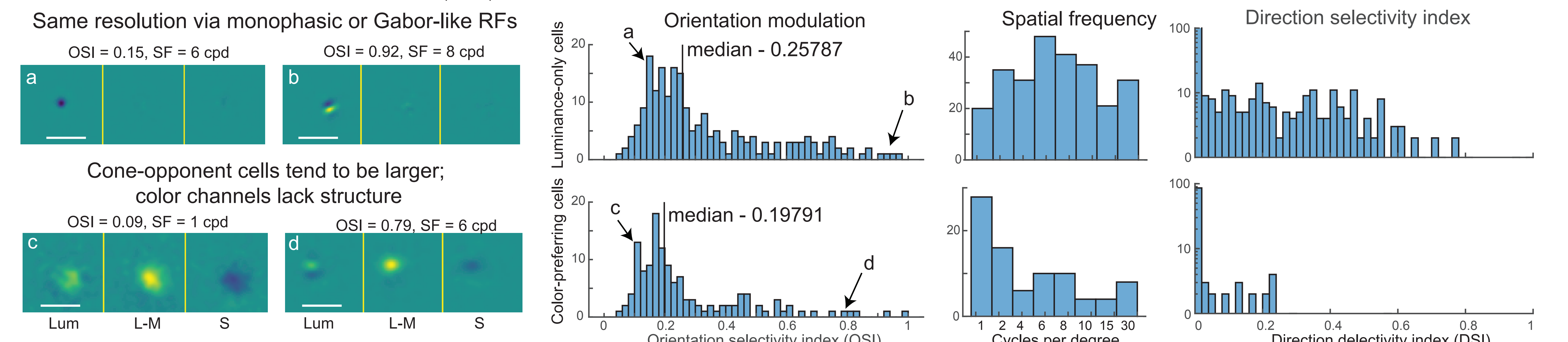
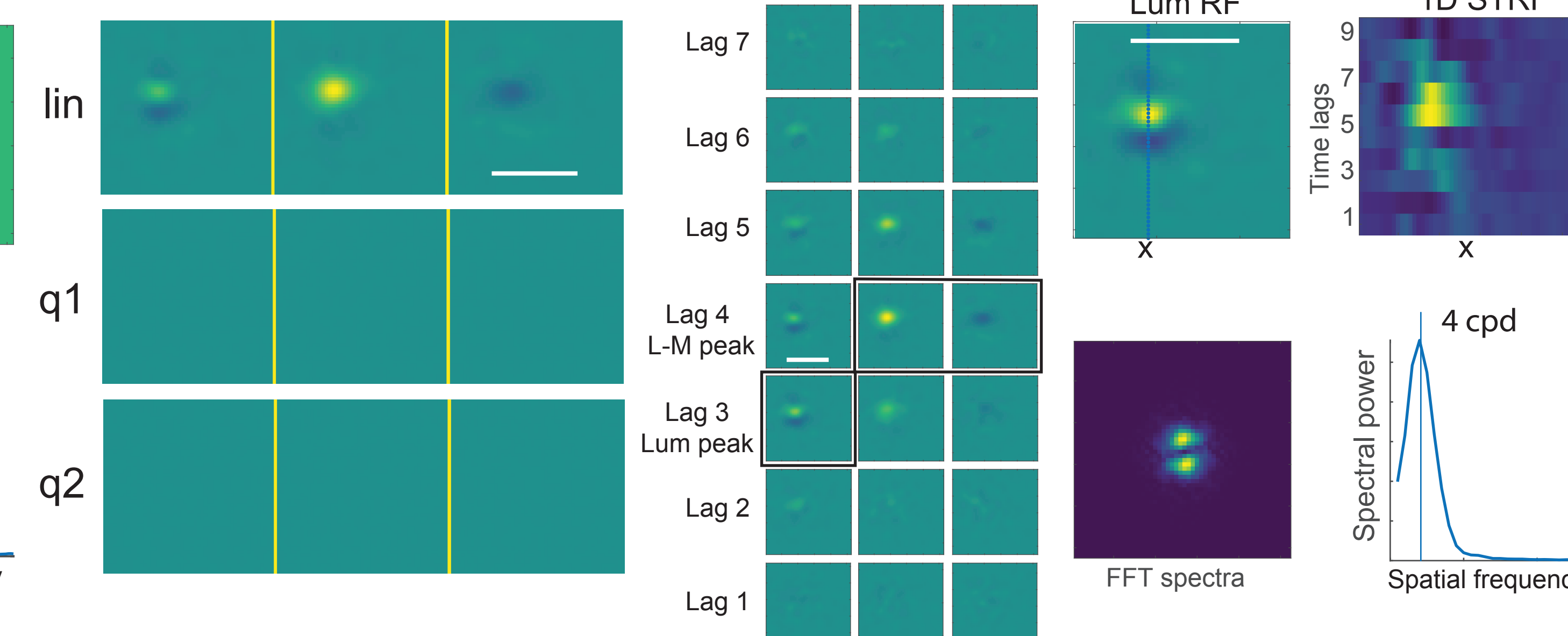
Dichotomy between luminance and color



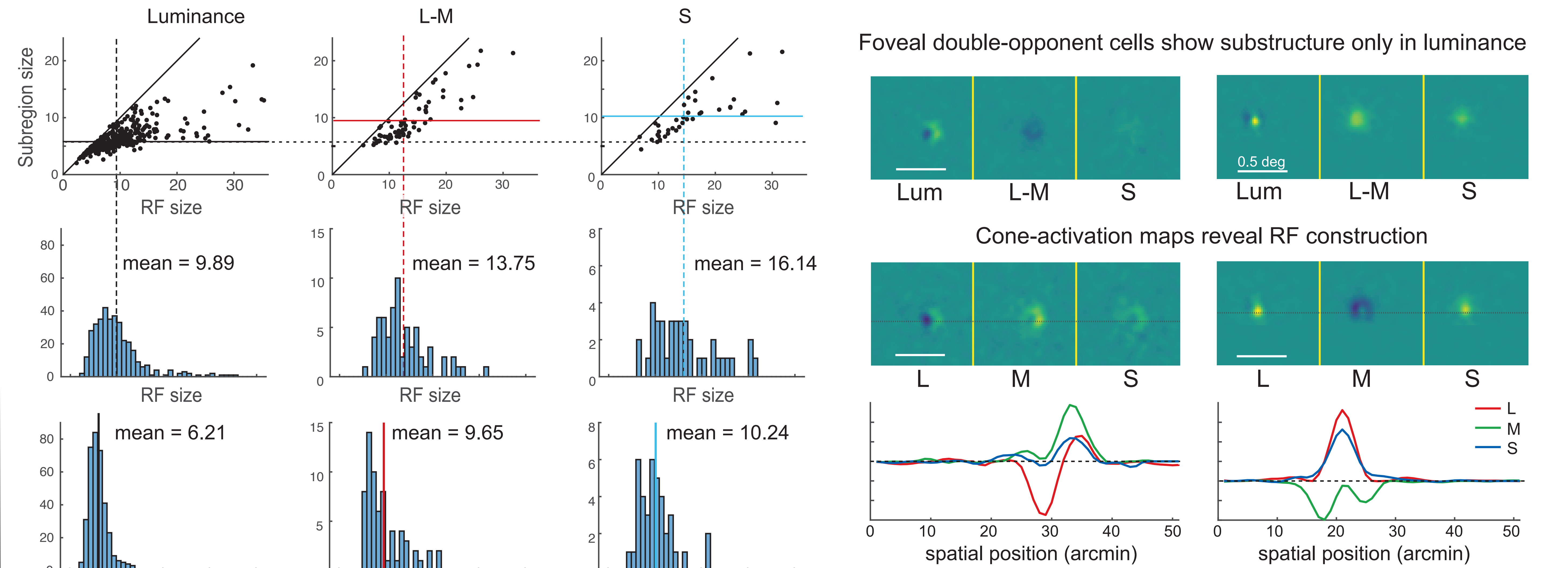
High-resolution luminance



Low-resolution color



Finer RF substructure in luminance than color



Unique RF construction due to cone sampling constraints in the fovea?

All values are shown for cells with significant tuning in the respective channel (weight > 0.3)