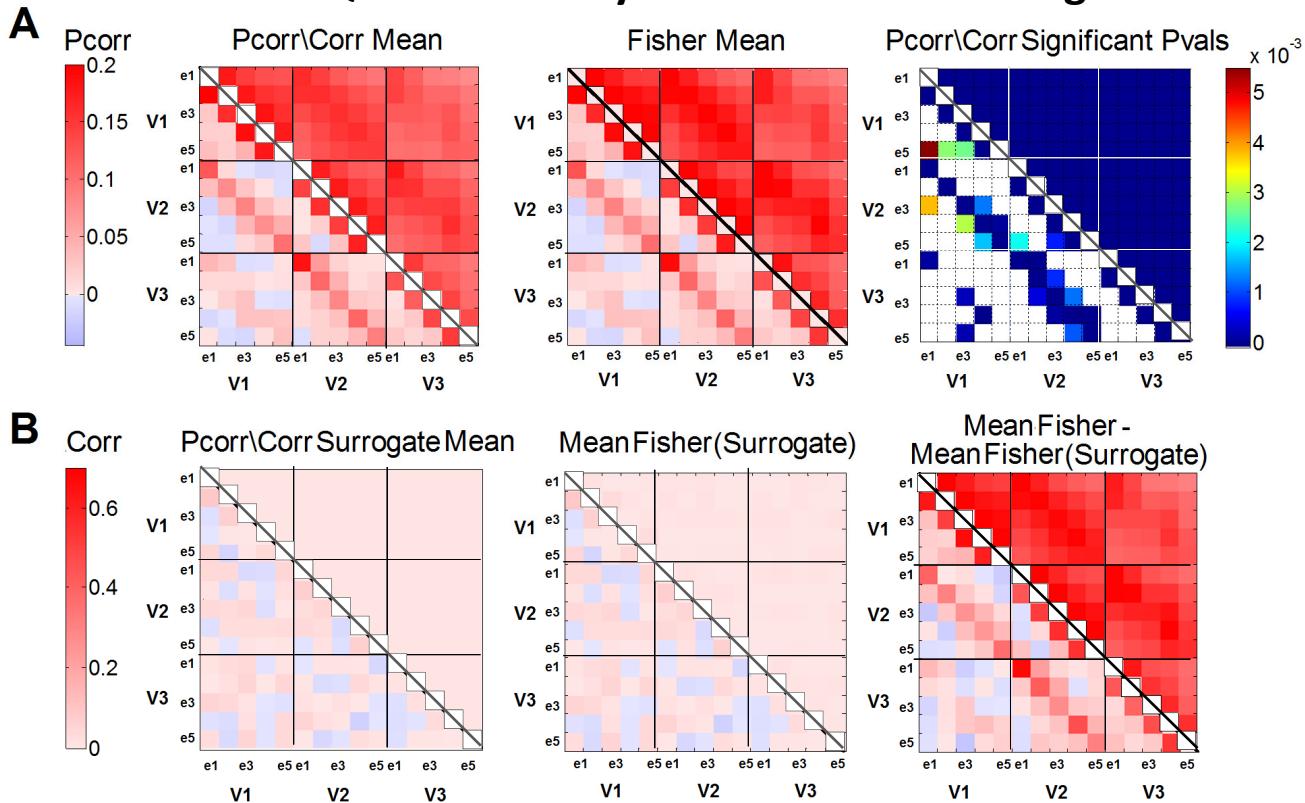


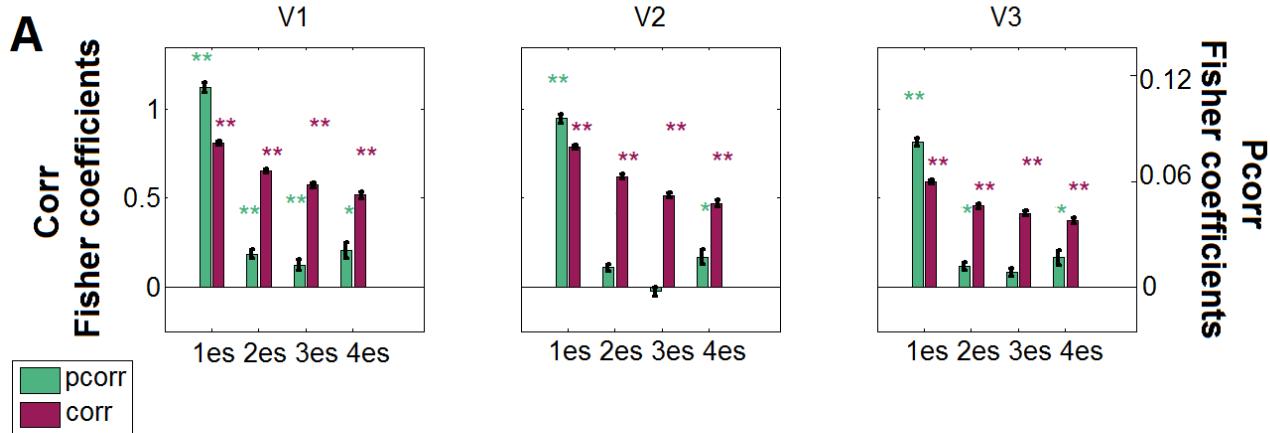
## Within Quadrant Analysis With Fourier Surrogate



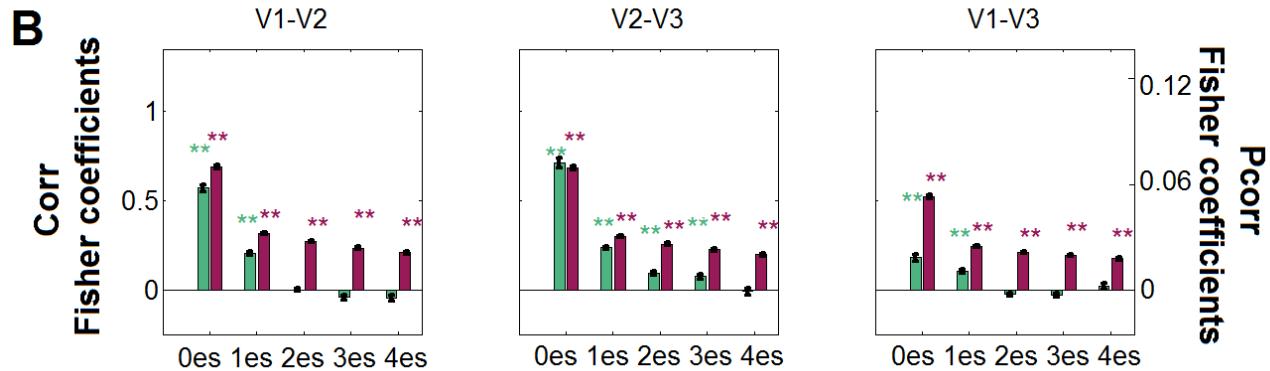
**Supplementary Figure 5.** Mean functional connectivity measures within a quadrant, computed across all subjects, four quadrants, and runs per subjects; *statistics done with use of a Fourier Surrogate*. To create these surrogate data, we shuffled the phase values from the Fourier transform of the original time-courses, then computed the inverse Fourier transform. Presentation is as in Supplementary Figure 1.

## Within Quadrant Analysis With Fourier Surrogate

Within area mean fisher coefficients according to eccentricity separations

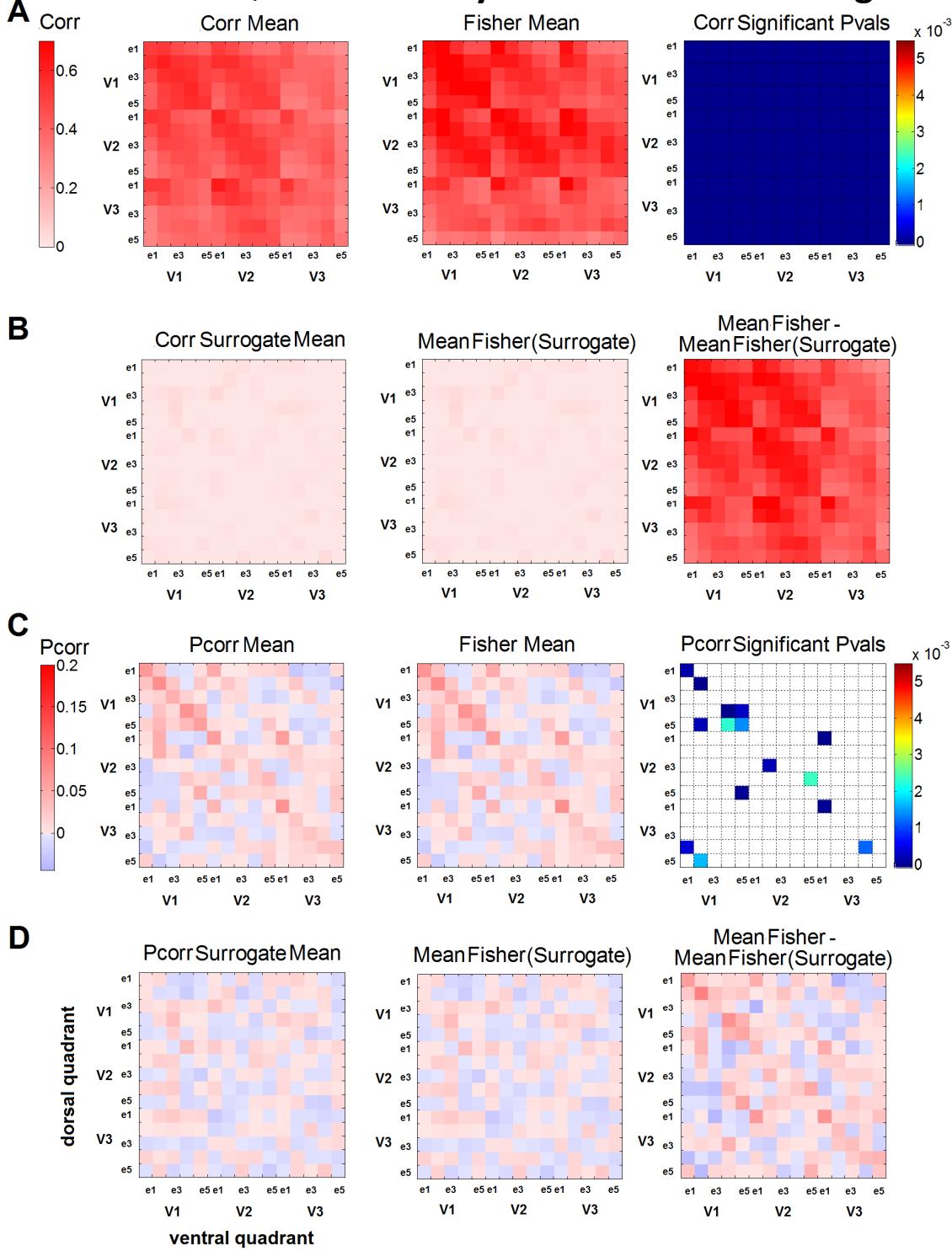


Between area mean fisher coefficients according to eccentricity separations



**Supplementary Figure 6.** Mean functional connectivity measures according to eccentricity bin groupings associated with ROI pairs composed of regions residing within the quadrant; *statistics done with use of a Fourier Surrogate*. Across all plots, green and purple bars represent the mean Fisher transformed Pcorr and Corr, respectively, computed across all subjects, runs and pairs of quadrants. Error bars reflect the standard error of the mean across measurements. The format of presentation is as in Supplementary Figure 2. \* p<0.05; \*\* p<0.001.

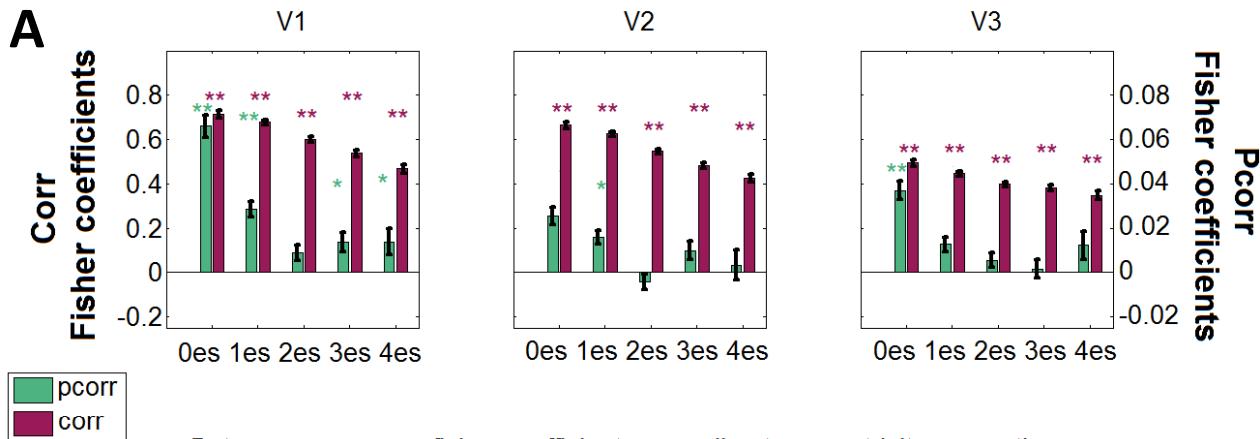
## Between Quadrant Analysis With Fourier Surrogate



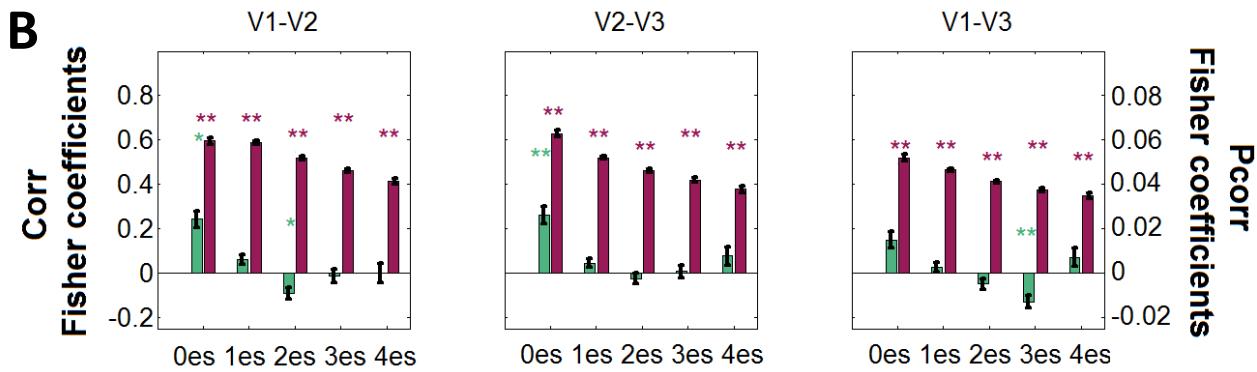
**Supplementary Figure 7.** Mean functional connectivity measures associated with functional connections between ROIs residing in different quadrants in a hemisphere; *statistics done with use of a Fourier Surrogate*. Presentation is as in Suppl. Fig. 3. All entries along the diagonal that show statistical significance here also do in Fig. 7. Not all entries along the diagonal that show statistical significance in Fig. 7 and Suppl. Fig. 3 show it here too, most likely due to the lesser statistical power here (comparing 8 measured values to only 8 surrogate values; Suppl. Fig. 3 has 28 surrogate values; Fig. 7 compares 8 measured values to non-variable 0).

## Between Quadrant Analysis With Fourier Surrogate

Within area mean fisher coefficients according to eccentricity separations



Between area mean fisher coefficients according to eccentricity separations



**Supplementary Figure 8.** Mean functional connectivity measures according to eccentricity bin groupings associated with ROI pairs composed of regions residing in different quadrants of a hemisphere; *statistics done with use of a Fourier Surrogate*. Presentation is as in Supplementary Figure 4.