Glomb et al., "Functional harmonics reveal multi-dimensional basis functions underlying cortical organization", Cell Reports (2021)			
Results section/Figure(s)	**main script**	**description**	**dependencies** (may be listed multiple times)
Estimation of functional harmonics; Figure 2			
	extract_dconn.m	extracts dense FC downloaded from HCP	
	manifold_HCP_S900.m	computes the functional harmonics	computeAdjacencyFastEfficient.m
			getConnectedComponents.m
			computeLaplacianEigenmaps.m
			pdistIndex
	plot_fct_harmonics.m	produces surface plots (including borders) shown in Figure 2 as well as Data S1, pp. 1-5	get_border_to_mat.m
			get_clusters.m
			plot_HCP_boundaries_for_clust.m
Functional harmonics capture sub-areal topographic organization; Figure 3			
	plot_retinotopy_short.m	computes correlations between angule/eccentricity maps and functional harmonics in V1-V4 and produces polar plots shown in Figure 3 b,c as well as Supplementary Figure 2b	
	silh_vals_som.m	computes somatotopic silhouette values, produces plot in Supplementary Figure 2a	compute_silh_vals_som.m
			get_border_to_mat.m
			create_som_subareas.m
	plot_harmonics_2D.m	produces plot shown in Figure 3a, as well Supplementary Figure 1	fancy_figure.m
			connRSMplotManifold
Functional harmonics reveal specialized brain areas; Figure 4			
	silh_vals.m	computes modified silhouette values, produces plots shown in Figure 4	compute_silh_vals.m
			get_surface_labels.m
Relating rest and task with functional harmonics; Figures 5 and 6			
	controls.m	compute reconstruction errors of all function bases and compare them; produce plots in Figure 5 as well as Supplementary Figure 4	create_rotations.m
			compute_recon_errors.m
	recon.m	compute reconstruction errors for functional harmonics + their rotations; produces plots in Figure 6 as well as Data S1, p. 6	create_rotations.m
			compute_recon_errors.m
			plot_HCP_on_surface
Supplementary Figure 3			
	compute_dist_matrices.m	computes and plots the distance matrices in Supplementary Figure 3a-c	get_color_order_HCP.m
	plot_aud_hierarchy.m	plot the relationship between fct. harmonic 10 and the auditory hierarchy in Supplementary Figure 3d	
Utilities			
connRSMreadGII.m	read HCP surfaces		
plot_HCP_boundaries	adds boundaries to surface plot data		
main_connRSM_adjustYeoRSNs2HCP.m	assigns parcels to Yeo RSNs		
connMapVibModes2CmapRainbow_v2.m	the colormap used for functional harmonics throughout the paper		