

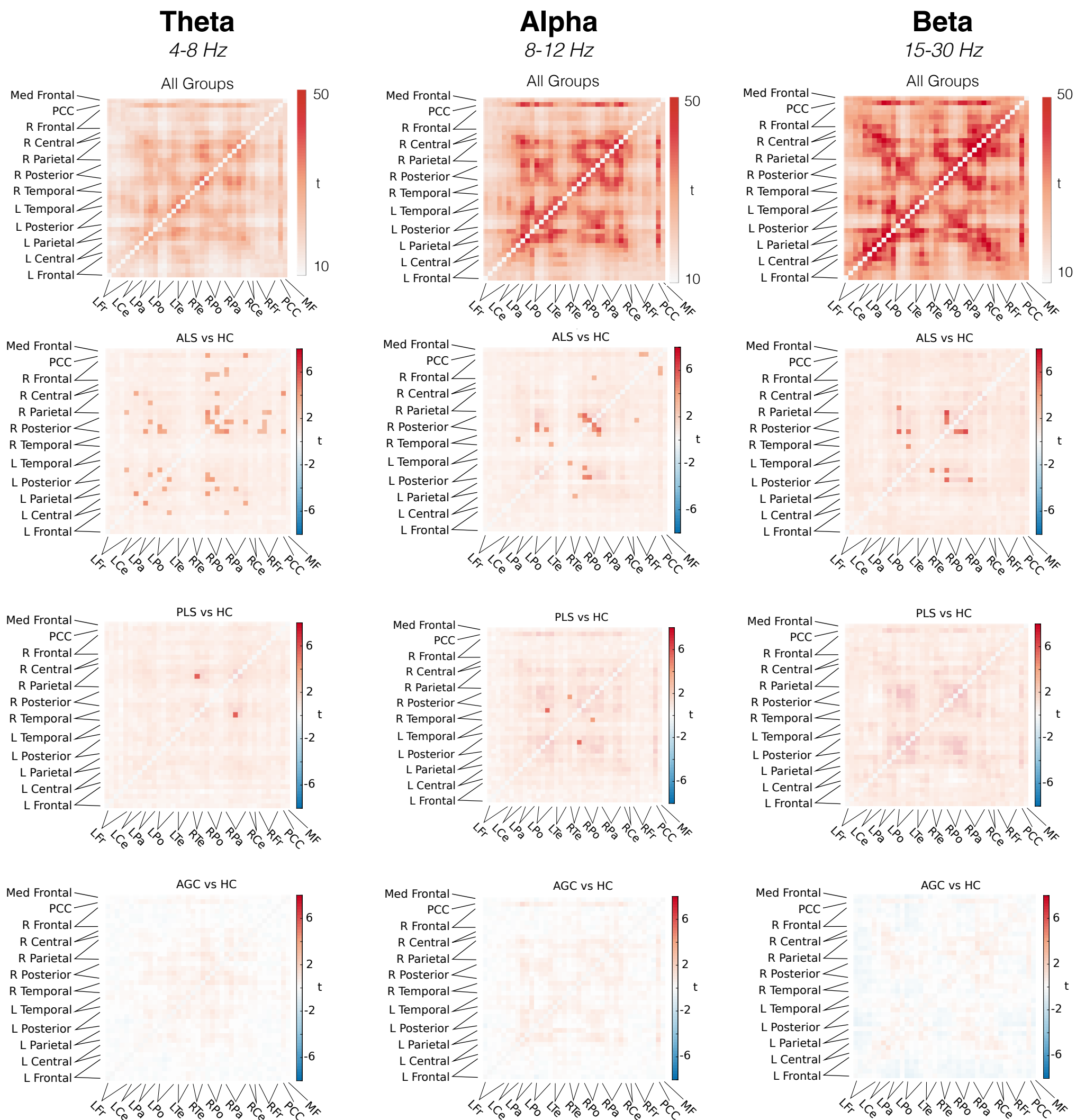


Figure e-1. Frequency band limited functional connectivity structure at rest and comparison between patient groups and healthy controls. The first row demonstrates the expected physiological differences in functional connectivity (FC) at different neural oscillation frequencies. Stronger fronto-central connectivity is demonstrated within the beta-band, strong parieto-occipital within alpha, and overall weaker connectivity in theta. Group comparisons within frequency bands corroborate the FC findings from the broad-band signal. FC increases are most marked in the ALS patients, not restricted to any particular frequency ranges, with spatial emphasis on posterior, temporal and posterior cingulate cortex. FC increases are less widespread within PLS patients (within theta and alpha band only) and not significantly detected within Asymptomatic Gene Carriers.