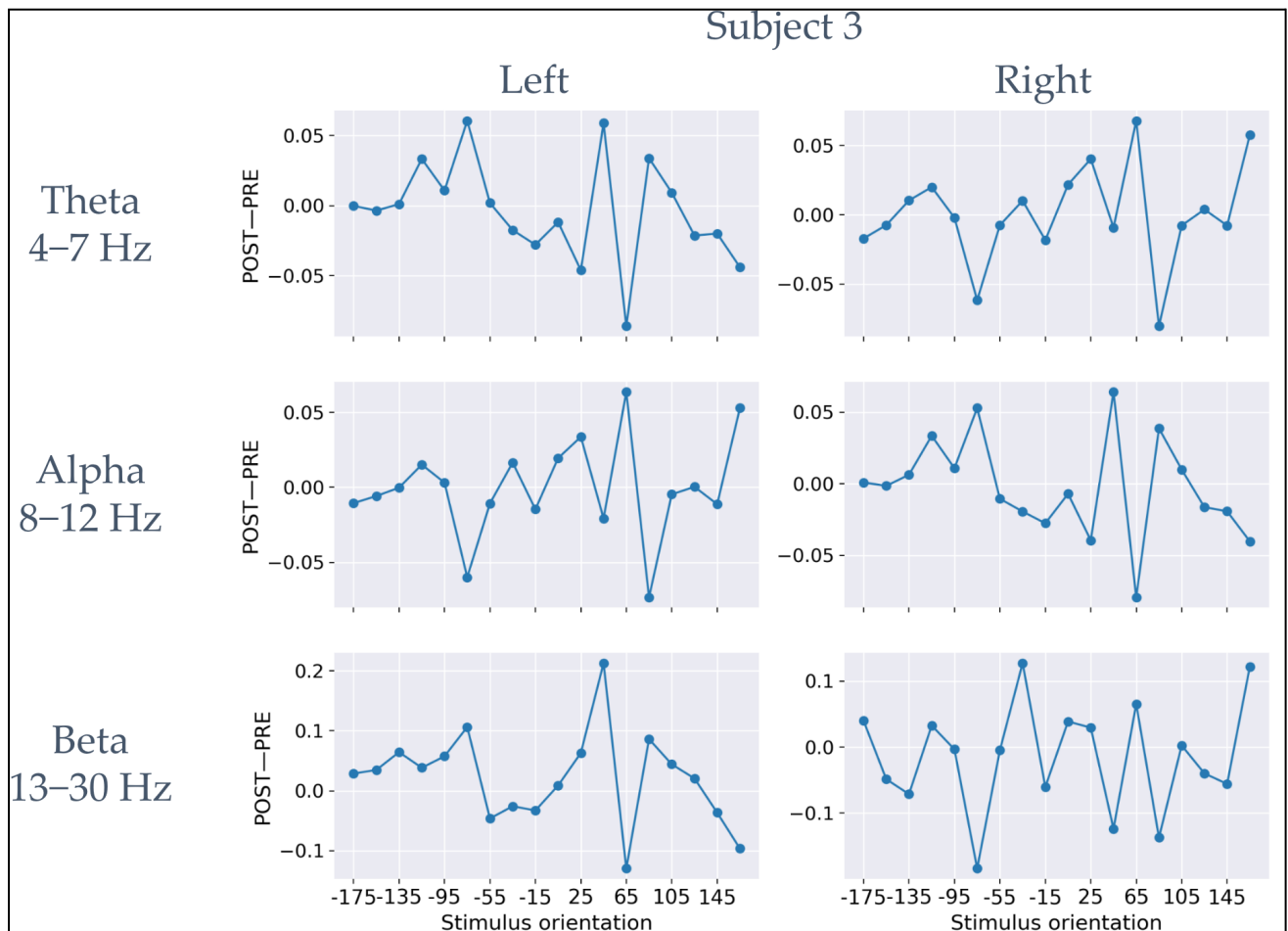
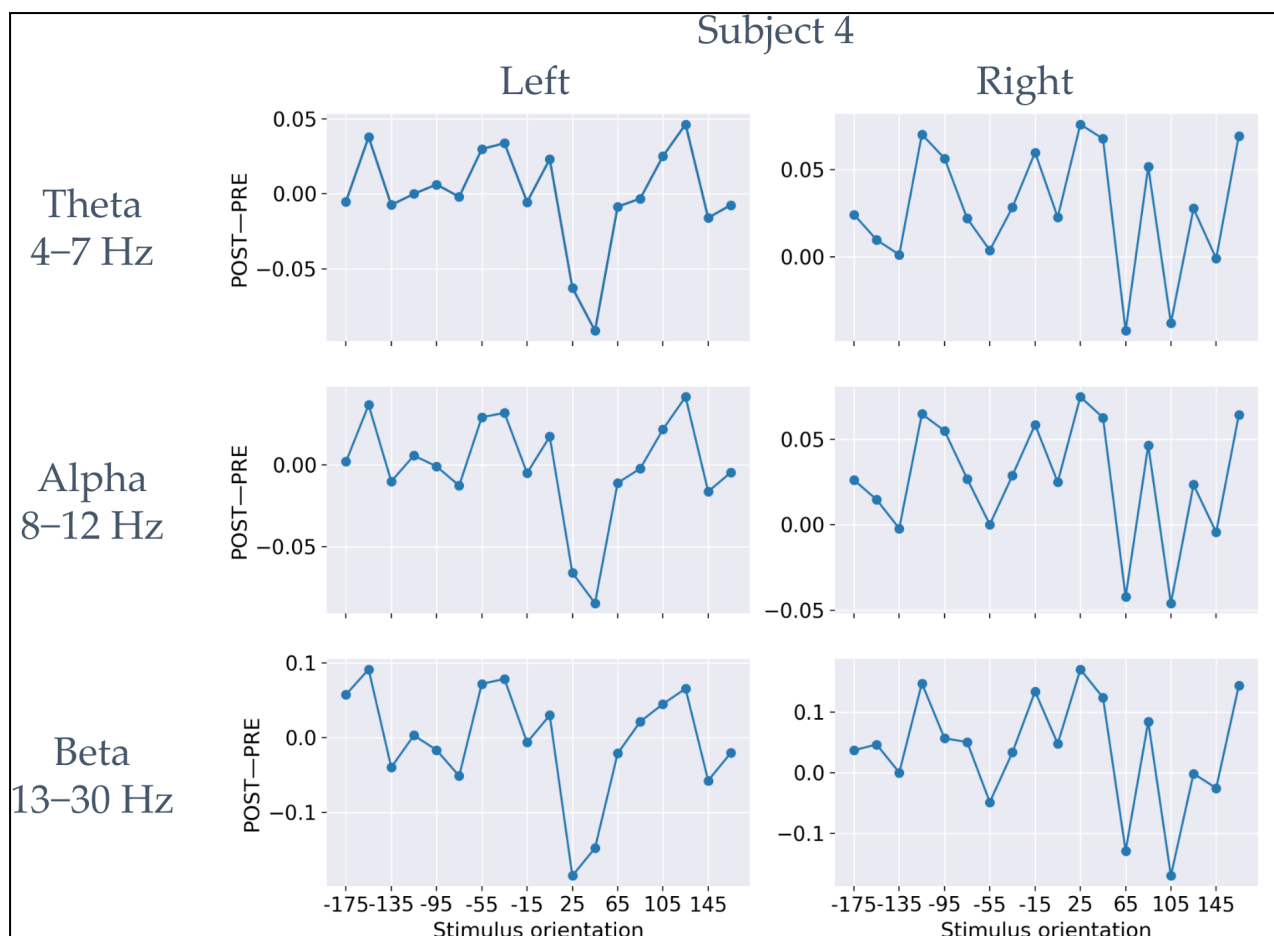


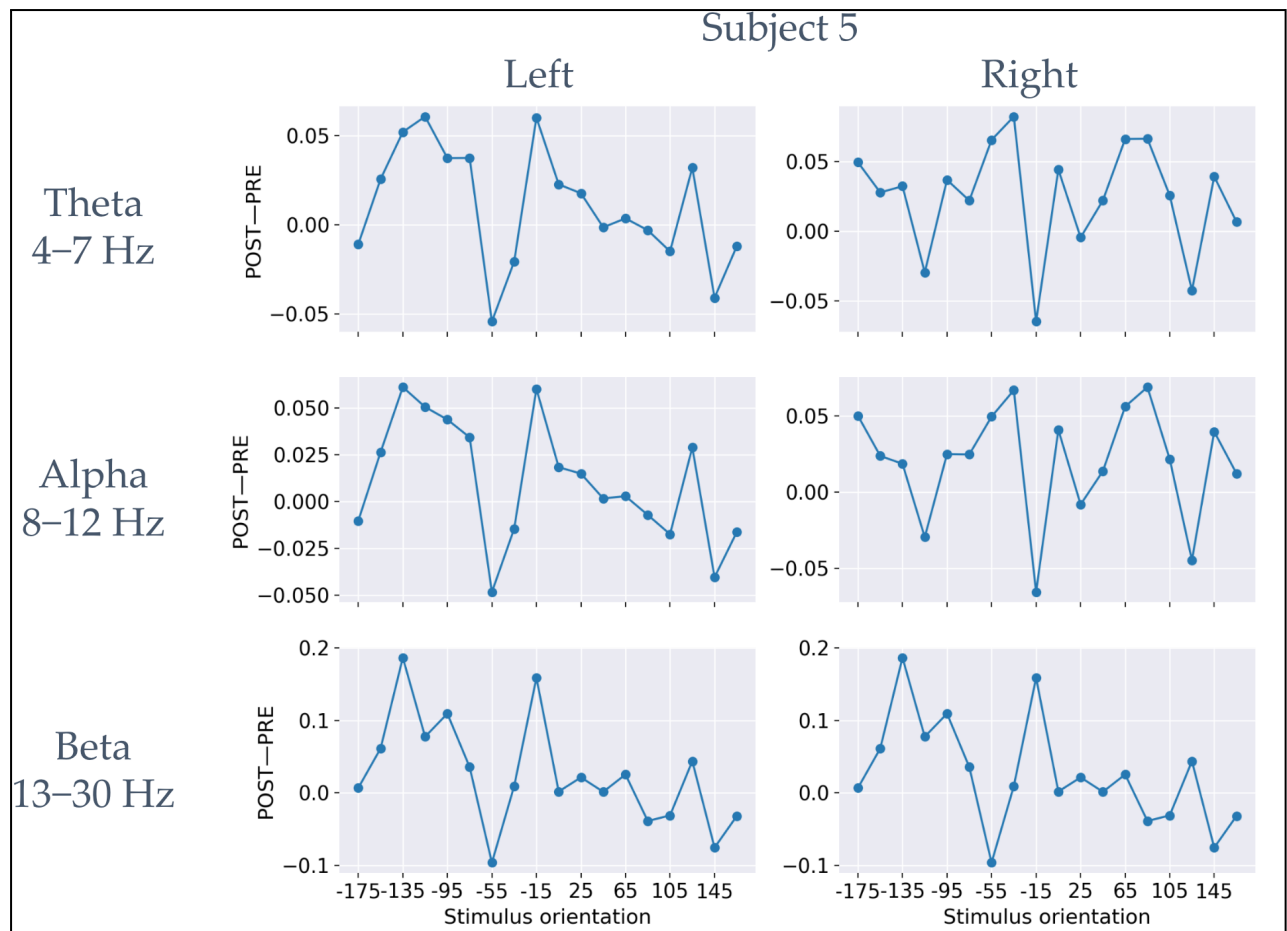
## Supplementary Materials



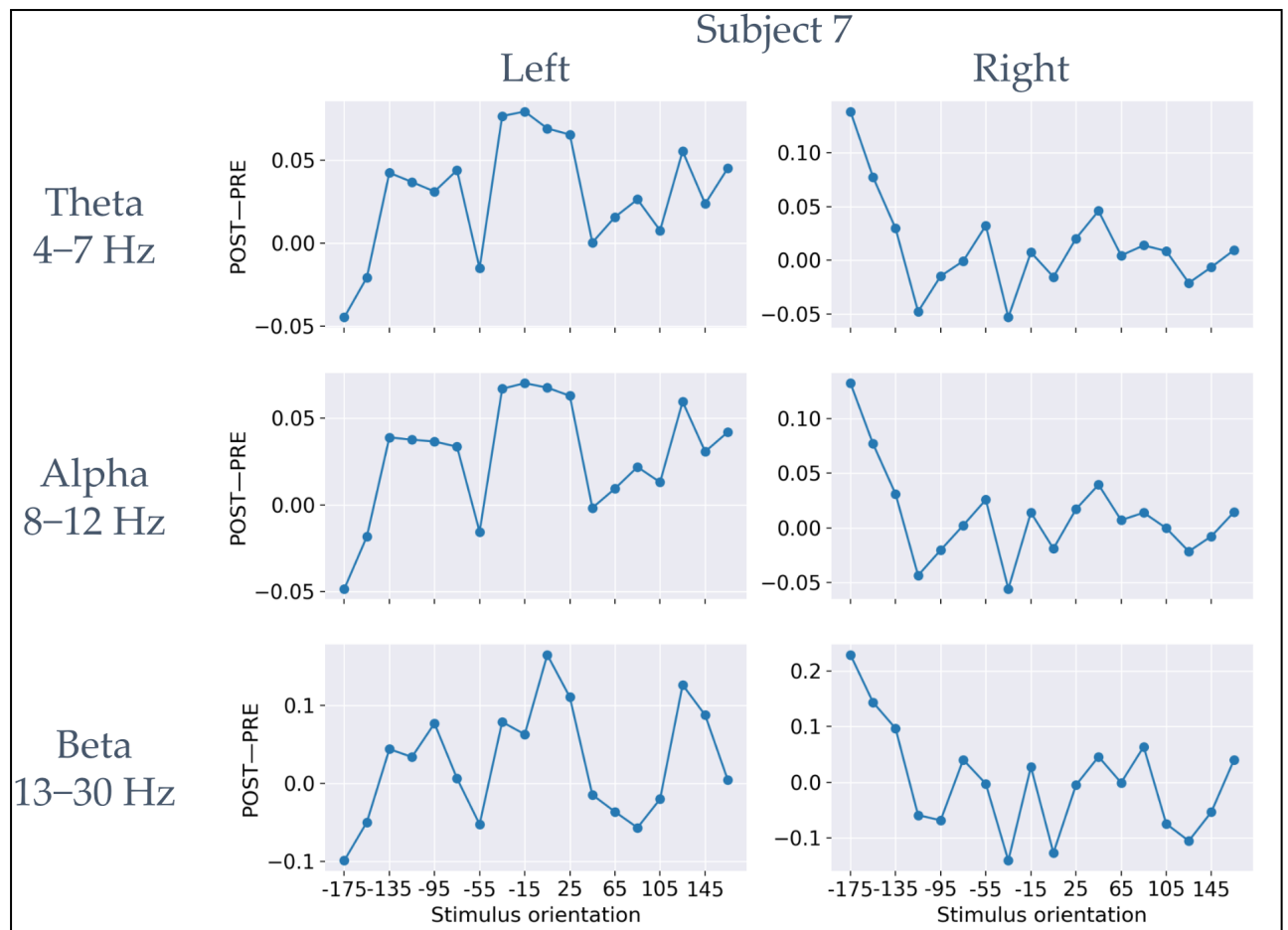
**Figure S1** | Plots of iPLV differences between post- and pre-stimulus intervals on subject 3, averaged across macro-orientations of  $20^\circ$  for theta, alpha and beta frequency bands. In the first column, the plots represent the average as a function of the macro-orientation for the channels close to the left primary motor cortex for each frequency band. In the second column, the plots represent the mean as a function of orientation for the channels close to the right primary motor cortex for each frequency band.



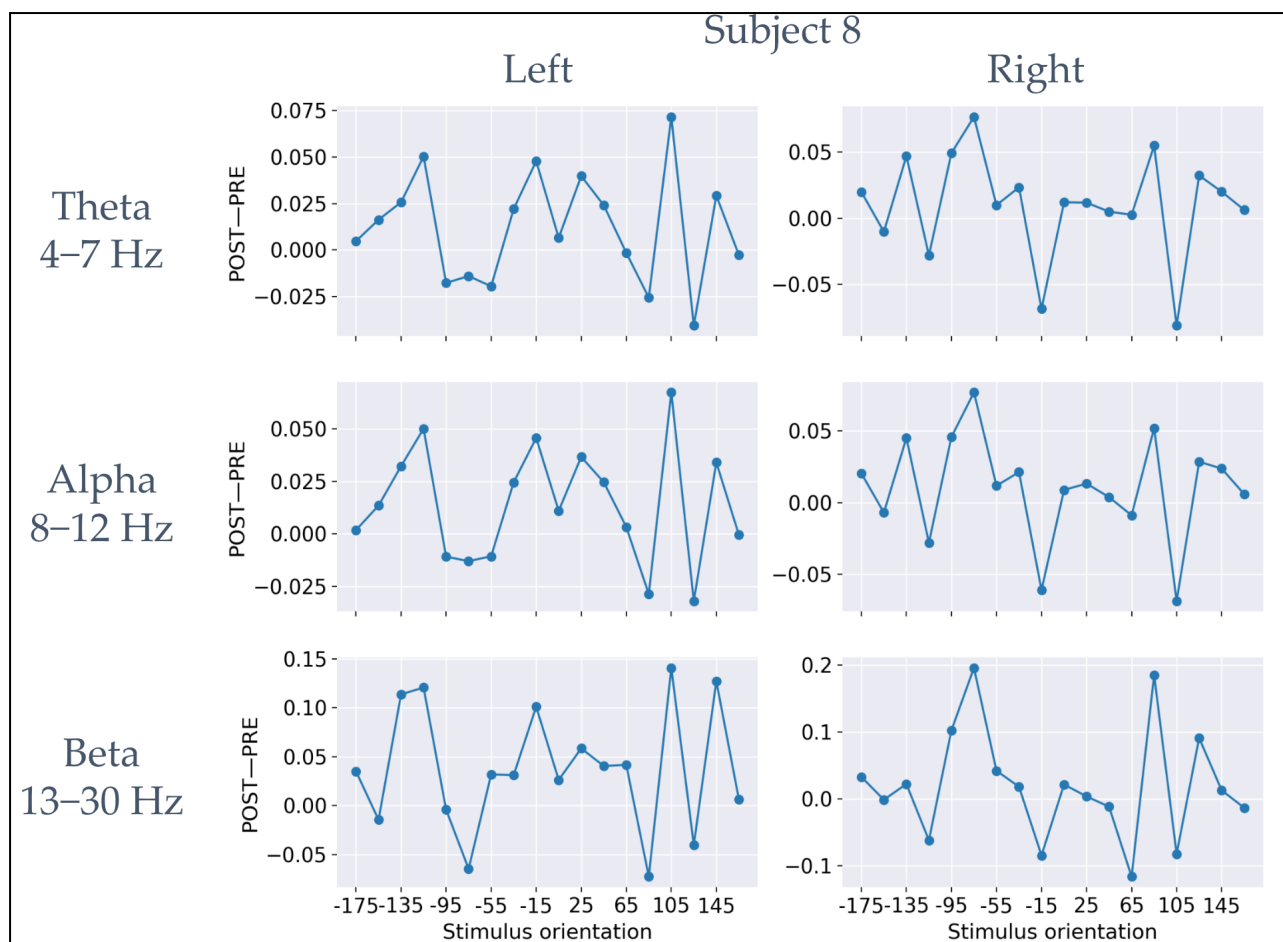
**Figure S2|** Plots of iPLV differences between post- and pre-stimulus intervals on subject 4, averaged across macro-orientations of 20° for theta, alpha and beta frequency bands. In the first column, the plots represent the average as a function of the macro-orientation for the channels close to the left primary motor cortex for each frequency band. In the second column, the plots represent the mean as a function of orientation for the channels close to the right primary motor cortex for each frequency band.



**Figure S3** | Plots of iPLV differences between post- and pre-stimulus intervals on subject 5, averaged across macro-orientations of  $20^\circ$  for theta, alpha and beta frequency bands. In the first column, the plots represent the average as a function of the macro-orientation for the channels close to the left primary motor cortex for each frequency band. In the second column, the plots represent the mean as a function of orientation for the channels close to the right primary motor cortex for each frequency band.



**Figure S4** | Plots of iPLV differences between post- and pre-stimulus intervals on subject 7, averaged across macro-orientations of  $20^\circ$  for theta, alpha and beta frequency bands. In the first column, the plots represent the average as a function of the macro-orientation for the channels close to the left primary motor cortex for each frequency band. In the second column, the plots represent the mean as a function of orientation for the channels close to the right primary motor cortex for each frequency band.



**Figure S5|** Plots of iPLV differences between post- and pre-stimulus intervals on subject 8, averaged across macro-orientations of  $20^\circ$  for theta, alpha and beta frequency bands. In the first column, the plots represent the average as a function of the macro-orientation for the channels close to the left primary motor cortex for each frequency band. In the second column, the plots represent the mean as a function of orientation for the channels close to the right primary motor cortex for each frequency band.