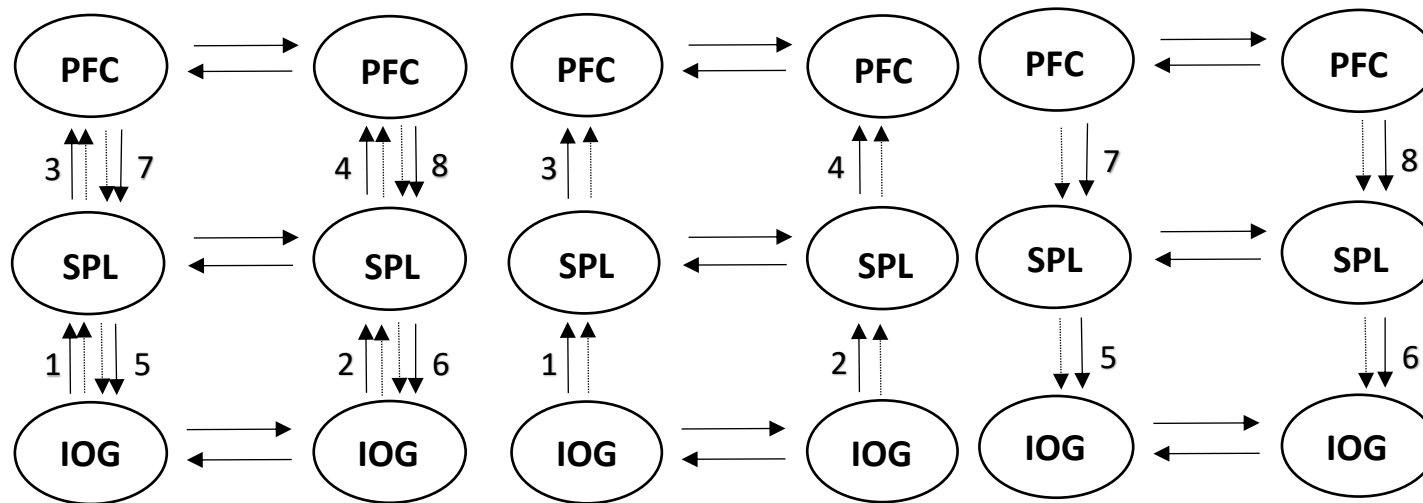


Supplementary Figures

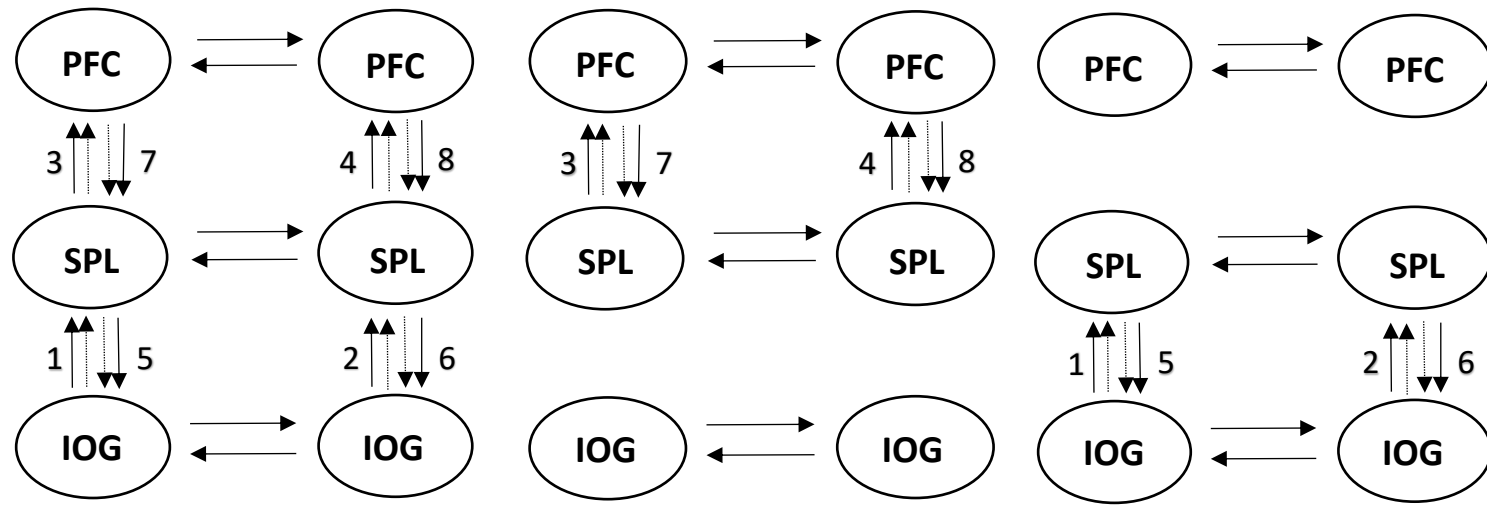
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Supplementary Figure 1: Models tested by Bayesian model selection – step 1: full model versus feedforward connections only versus feedback connections only. Numbers 1-8 refer to connection order for parameter estimates as displayed in Figures 2 and 3. PFC = Prefrontal corex, SPL = Superior parietal lobule, IOG = Inferior occipital gyrus. Arrows = linear coupling, Dashed arrows = non-linear coupling.

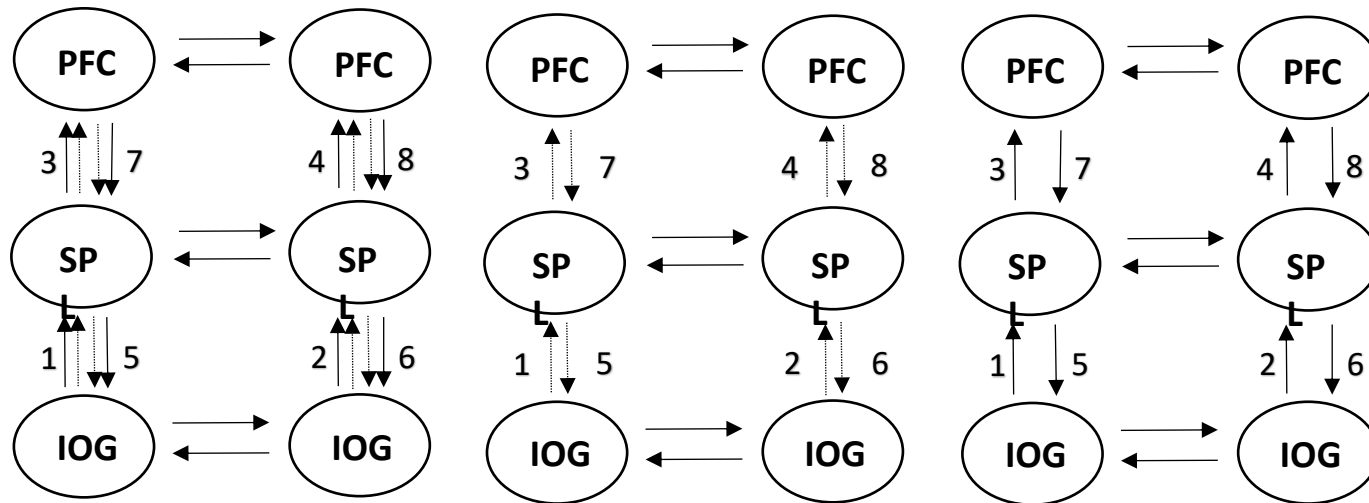


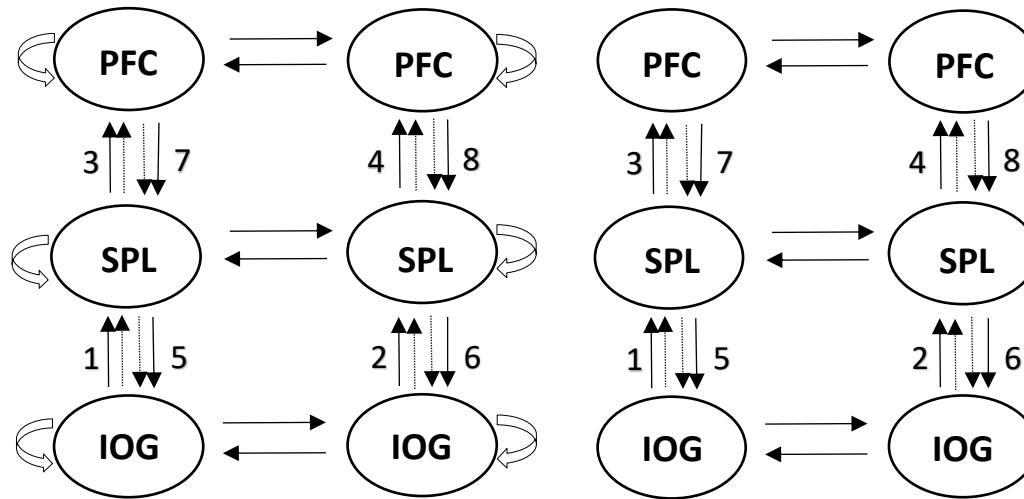
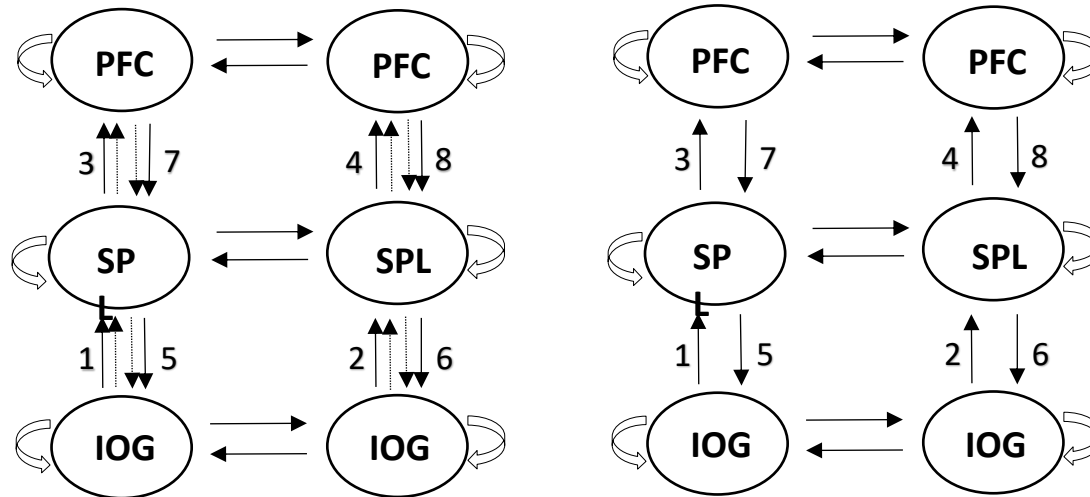
Supplementary Figure 2: Models tested by Bayesian model selection – step 2: full model versus full with no occipitoparietal connections versus full with no frontoparietal connections.

Numbers 1-8 refer to connection order for parameter estimates as displayed in Figures 2 and 3. PFC = Prefrontal corex, SPL = Superior parietal lobule, IOG = Inferior occipital gyrus. Arrows = linear coupling, Dashed arrows = non-linear coupling.

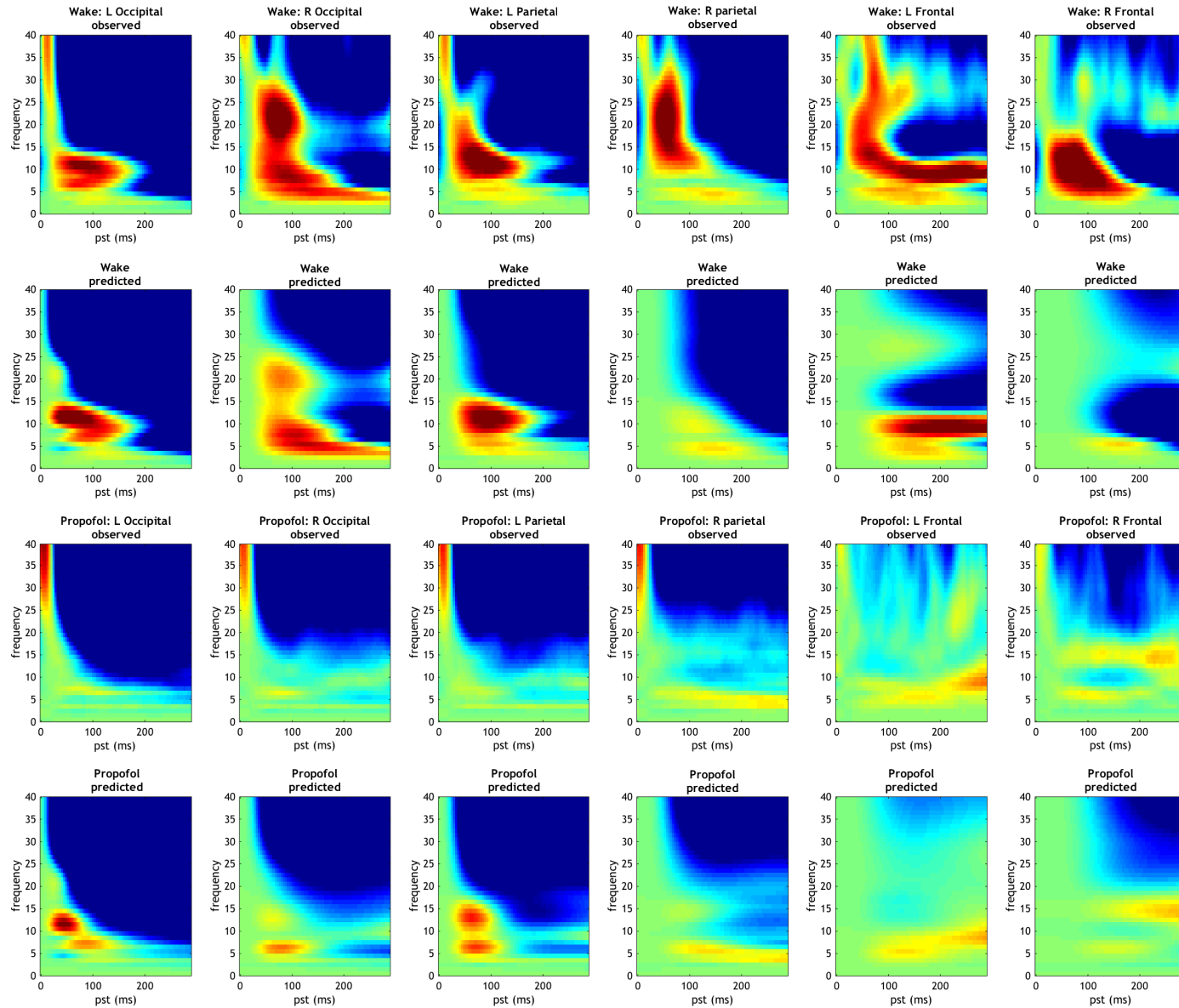


Supplementary Figure 3: Models tested by Bayesian model selection – step 3: full model versus non-linear cross-frequency coupling versus linear coupling modulations. Numbers 1-8 refer to connection order for parameter estimates as displayed in Figures 2 and 3. PFC = Prefrontal cortex, SPL = Superior parietal lobule, IOG = Inferior occipital gyrus. Arrows = linear coupling, Dashed arrows = non-linear coupling.



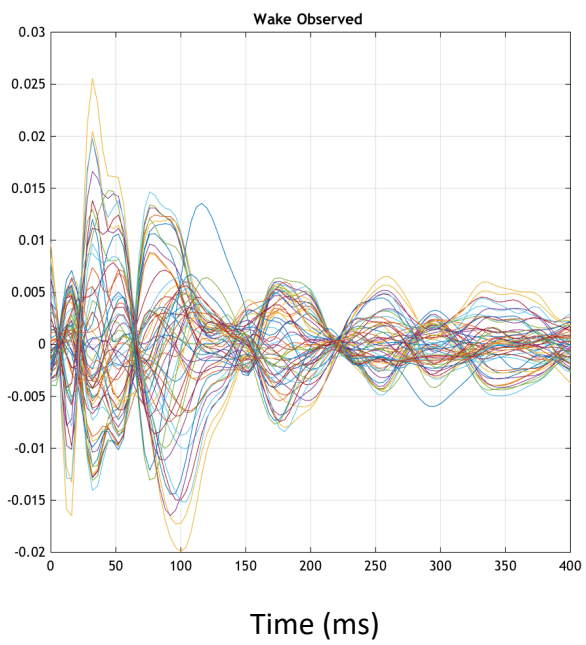
A**B**

Supplementary Figure 4: Models tested by Bayesian model selection – step 4: inclusion of intrinsic modulation at the source or not. Intrinsic source modelling versus no intrinsic source modelling with non-linear connections (A) and without (B). Numbers 1-8 refer to connection order for parameter estimates as displayed in Figures 2 and 3. PFC = Prefrontal cortex, SPL = Superior parietal lobule, IOG = Inferior occipital gyrus. Arrows = linear coupling, Dashed arrows = non-linear coupling.

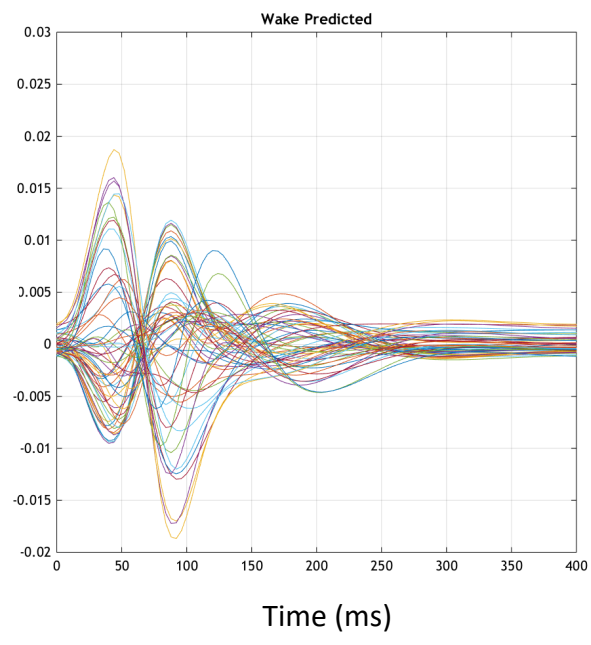


Supplementary Figure 5: Example of source reconstructed time frequency (observed) and DCM of the induced response (predicted) of occipital TMS in wake and propofol-induced unresponsiveness from a single subject. Columns refer to left occipital, right occipital, left parietal, right parietal, left frontal and right frontal regions respectively.

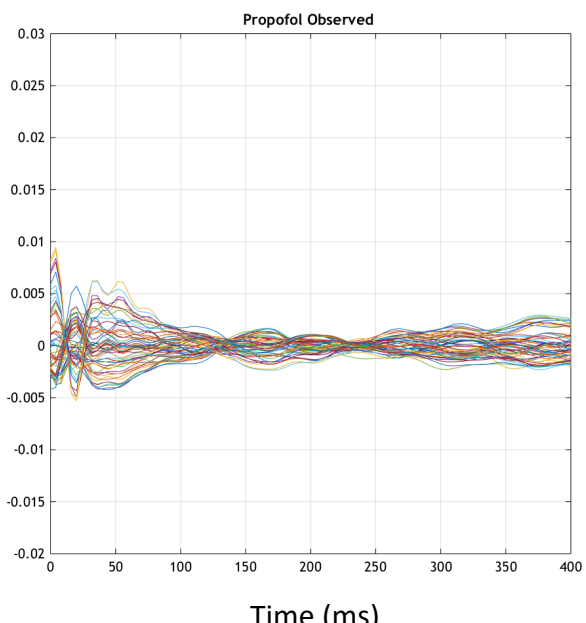
Amplitude
(microVolts)



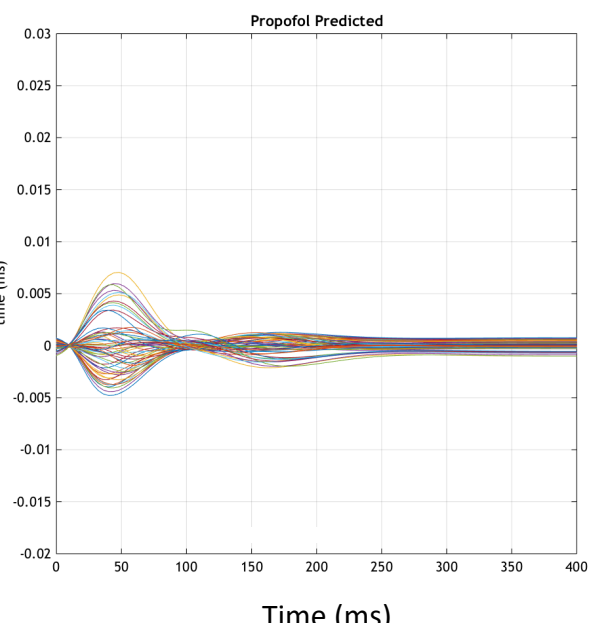
Amplitude
(microVolts)



Amplitude
(microVolts)



Amplitude
(microVolts)



**Supplementary Figure 6:
Example of source
reconstructed ERP
(observed) and DCM
of the ERP (predicted)
of occipital TMS in wake
and propofol-induced
unresponsiveness from a
representative subject.**