

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: Numerical source data for plotting the Figure 2: Brain-wide dynamics is quantified by metastability, derived from resting state BOLD activity.

File name: Supplementary Data 2

Description: Numerical source data for plotting the Figure 3: Graph theoretical metrics derived from brain connectomes, empirical SCs and FCs.

File name: Supplementary Data 3

Description: Numerical source data for plotting the Figure 4b: Model-based estimated parameters (GABA-Glutamate values) for averaged young and older adults (n=1 young, n=1 old), produced by 50 independent simulations.

File name: Supplementary Data 4

Description: Numerical source data for plotting the Figure 5: Participant-by-participant basis GABA-Glutamate values and their ratio estimation using the MDMF model inversion.

File name: Supplementary Data 5

Description: Numerical source data for plotting the Figure 6: Qualitative comparison between empirical and simulated FC properties.

