

## Supplementary materials

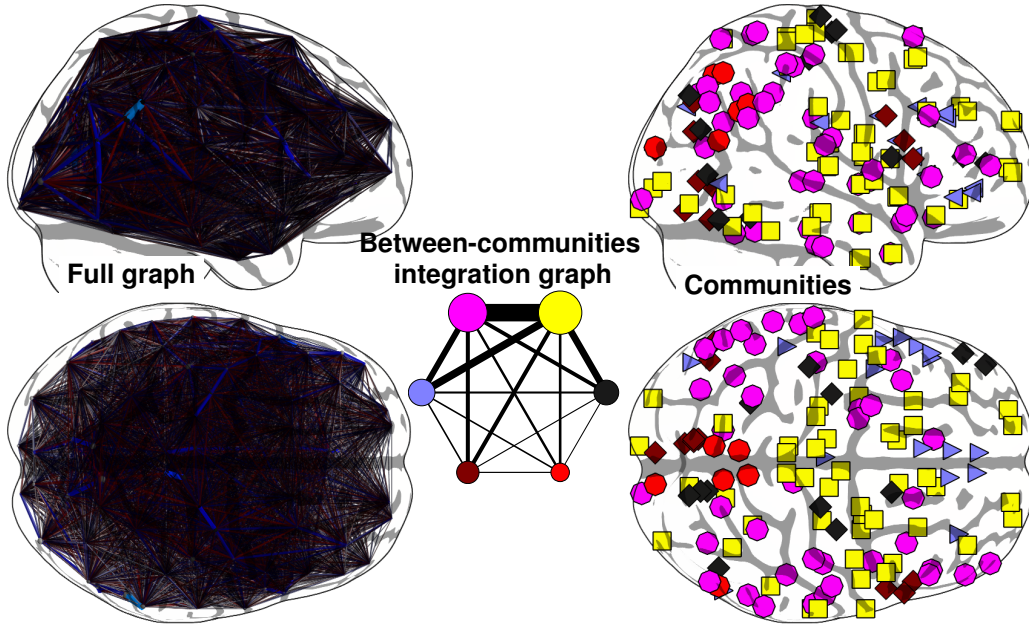


Figure 1: Graph computed by maximum likelihood estimation on an individual subject's data. The graph displayed is not thresholded, but on the top view, connections linking one region to its corresponding one on the opposite hemisphere are not displayed.

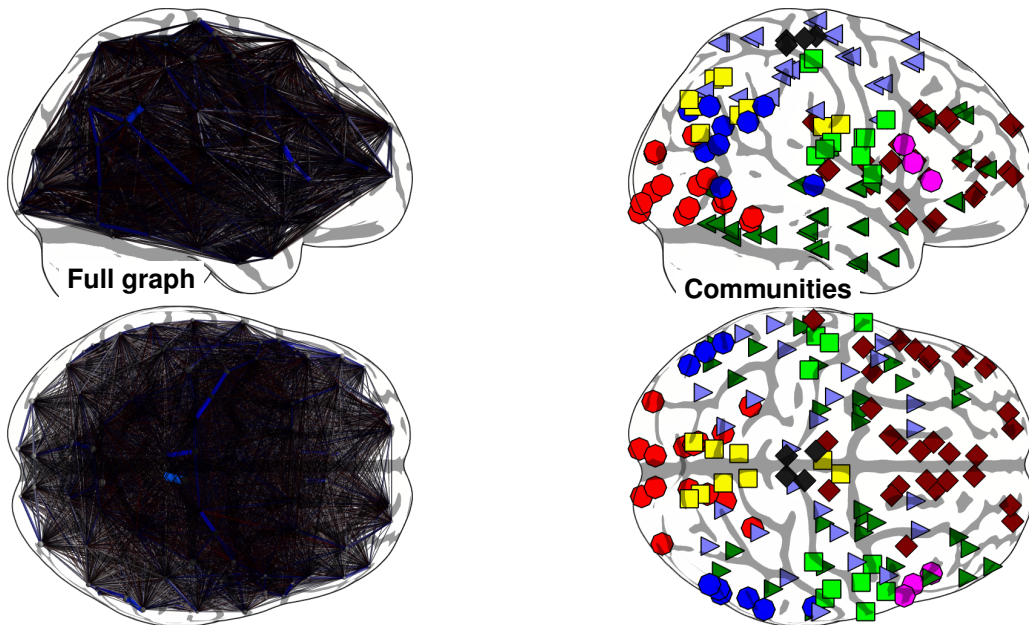


Figure 2: Graph computed by  $\ell_1$ -penalized estimation on an individual subject's data. The graph displayed is not thresholded, but on the top view, connections linking one region to its corresponding one on the opposite hemisphere are not displayed.