

**Table S3.** Global Properties of the Human Brain Functional Networks (Temporal Scale)

| Threshold, $S$ | $N$ | $K$ | $\langle k \rangle$ | $C_p$               | $L_p$               | $E_{loc}$           | $E_{glob}$          |
|----------------|-----|-----|---------------------|---------------------|---------------------|---------------------|---------------------|
| 8.41%          | 90  | 337 | 7.49                | 0.48<br>(0.10±0.01) | 2.70<br>(2.19±0.01) | 0.62<br>(0.13±0.02) | 0.37<br>(0.46±0.00) |
| 10.79%         | 90  | 432 | 9.60                | 0.53<br>(0.12±0.01) | 2.34<br>(2.00±0.00) | 0.69<br>(0.18±0.01) | 0.43<br>(0.50±0.00) |
| 12.16%         | 90  | 487 | 10.82               | 0.53<br>(0.13±0.01) | 2.20<br>(1.92±0.00) | 0.71<br>(0.23±0.02) | 0.45<br>(0.52±0.00) |
| 15.38%         | 90  | 616 | 13.69               | 0.54<br>(0.16±0.01) | 1.98<br>(1.79±0.00) | 0.74<br>(0.35±0.02) | 0.50<br>(0.56±0.00) |
| 16.78%         | 90  | 672 | 14.93               | 0.54<br>(0.17±0.01) | 1.91<br>(1.75±0.00) | 0.74<br>(0.40±0.01) | 0.52<br>(0.57±0.00) |

$S$  indicates the network sparsity thresholds that are used to construct temporal brain functional networks (see Materials and Methods).  $N$  and  $K$  are the number of nodes and edges in the brain networks, respectively.  $\langle k \rangle$ ,  $C_p$ ,  $L_p$ ,  $E_{loc}$  and  $E_{glob}$  denote the average degree, clustering coefficient, characteristic path length, local and global efficiency, respectively. The values in bracket indicate the corresponding topological parameters derived from 100 node- and degree-matched random networks. The temporal brain functional networks were found to have a small-world structure as they had an almost identical path length ( $L_p^{brain}/L_p^{random} \sim 1$ ) but were more locally clustered ( $C_p^{brain}/C_p^{random} \gg 1$ ) under multiple statistical thresholds in comparison with the matched random networks.