

A.2 Motif Combined Result Tables

A.2.1 Size 3

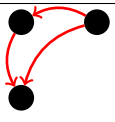
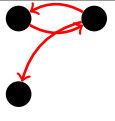
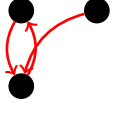
| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|---|-------|---------------|------|
| 1 | $\begin{bmatrix} 0 & 0 & 0 \\ 1 & 0 & 0 \\ 1 & 1 & 0 \end{bmatrix}$ |  | 278 | 0.418% | |
| 2 | $\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 1 \\ 1 & 1 & 0 \end{bmatrix}$ |  | 26 | 0.026% | |
| 3 | $\begin{bmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 1 & 0 & 0 \end{bmatrix}$ |  | - | 0.01% | |

Figure 52: Ratio and concentration of size 3 motifs in the ownership network

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|-------|---------------|---------------|
| 1 | $\begin{bmatrix} 0 & 2 & 2 \\ 2 & 0 & 2 \\ 2 & 2 & 0 \end{bmatrix}$ | | 1462 | 20.791% | Circle,Clique |
| 2 | $\begin{bmatrix} 0 & 2 & 2 \\ 2 & 0 & 2 \\ 3 & 2 & 0 \end{bmatrix}$ | | 1858 | 1.918% | Circle,Clique |
| 3 | $\begin{bmatrix} 0 & 2 & 2 \\ 2 & 0 & 2 \\ 3 & 3 & 0 \end{bmatrix}$ | | - | 0.945% | Circle,Clique |
| 4 | $\begin{bmatrix} 0 & 2 & 0 \\ 2 & 0 & 0 \\ 1 & 1 & 0 \end{bmatrix}$ | | 1170 | 0.805% | Circle,Clique |
| 5 | $\begin{bmatrix} 0 & 2 & 0 \\ 2 & 0 & 2 \\ 1 & 3 & 0 \end{bmatrix}$ | | 1032 | 0.118% | Circle,Clique |
| 6 | $\begin{bmatrix} 0 & 2 & 2 \\ 2 & 0 & 3 \\ 3 & 2 & 0 \end{bmatrix}$ | | - | 0.104% | Circle,Clique |
| 7 | $\begin{bmatrix} 0 & 0 & 0 \\ 1 & 0 & 0 \\ 1 & 1 & 0 \end{bmatrix}$ | | 97 | 0.078% | Circle,Clique |
| 8 | $\begin{bmatrix} 0 & 2 & 0 \\ 2 & 0 & 2 \\ 1 & 2 & 0 \end{bmatrix}$ | | 65 | 0.075% | Circle,Clique |
| 9 | $\begin{bmatrix} 0 & 0 & 0 \\ 1 & 0 & 2 \\ 1 & 2 & 0 \end{bmatrix}$ | | 516 | 0.059% | Circle,Clique |
| 10 | $\begin{bmatrix} 0 & 0 & 0 \\ 1 & 0 & 2 \\ 1 & 3 & 0 \end{bmatrix}$ | | - | 0.056% | Circle,Clique |
| 11 | $\begin{bmatrix} 0 & 2 & 0 \\ 3 & 0 & 0 \\ 1 & 1 & 0 \end{bmatrix}$ | | - | 0.021% | Circle,Clique |
| 12 | $\begin{bmatrix} 0 & 2 & 2 \\ 3 & 0 & 2 \\ 3 & 3 & 0 \end{bmatrix}$ | | - | 0.018% | Circle,Clique |

Figure 53: Ratio and concentration of size 3 motifs in the multiplex network (part 1)

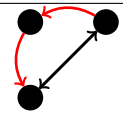
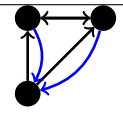
| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|---|-------|---------------|----------------|
| 13 | $\begin{bmatrix} 0 & 0 & 2 \\ 1 & 0 & 0 \\ 2 & 1 & 0 \end{bmatrix}$ |  | - | 0.017% | Circle, Clique |
| 14 | $\begin{bmatrix} 0 & 2 & 2 \\ 3 & 0 & 2 \\ 3 & 2 & 0 \end{bmatrix}$ |  | - | 0.016% | Circle, Clique |

Figure 54: Ratio and concentration of size 3 motifs in the multiplex network (part 2)

A.2.2 Size 4

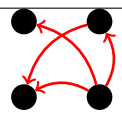
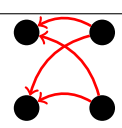
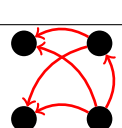
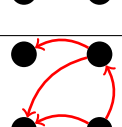
| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|--|---|-------|---------------|------|
| 1 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 1 & 1 & 0 \end{bmatrix}$ |  | 100 | 0.436% | |
| 2 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 \\ 1 & 1 & 0 & 0 \end{bmatrix}$ |  | 2024 | 0.351% | |
| 3 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 \\ 1 & 1 & 1 & 0 \end{bmatrix}$ |  | - | 0.068% | |
| 4 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 \\ 1 & 0 & 1 & 0 \end{bmatrix}$ |  | 29 | 0.016% | |

Figure 55: Ratio and concentration of size 4 motifs in the ownership network

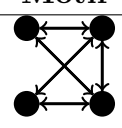
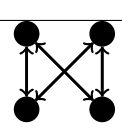
| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|--|---|-------|---------------|--------|
| 1 | $\begin{bmatrix} 0 & 0 & 1 & 1 \\ 0 & 0 & 1 & 1 \\ 1 & 1 & 0 & 1 \\ 1 & 1 & 1 & 0 \end{bmatrix}$ |  | 171 | 3.802% | |
| 2 | $\begin{bmatrix} 0 & 1 & 1 & 0 \\ 1 & 0 & 0 & 1 \\ 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 0 \end{bmatrix}$ |  | 42 | 0.104% | Circle |

Figure 56: Ratio and concentration of size 4 motifs in the interlocks network

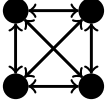
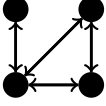
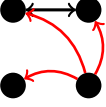
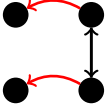
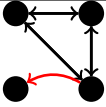
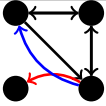
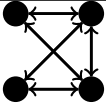
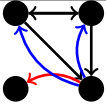
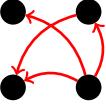
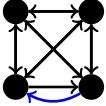
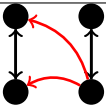
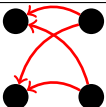
| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|--|---|-------|---------------|----------------|
| 1 | $\begin{bmatrix} 0 & 2 & 2 & 2 \\ 2 & 0 & 2 & 2 \\ 2 & 2 & 0 & 2 \\ 2 & 2 & 2 & 0 \end{bmatrix}$ |  | - | 2.43% | Clique |
| 2 | $\begin{bmatrix} 0 & 2 & 2 & 2 \\ 2 & 0 & 0 & 0 \\ 2 & 0 & 0 & 2 \\ 2 & 0 & 2 & 0 \end{bmatrix}$ |  | 65 | 1.353% | Circle, Clique |
| 3 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 0 & 2 & 0 & 0 \\ 1 & 1 & 1 & 0 \end{bmatrix}$ |  | 341 | 1.216% | Circle, Clique |
| 4 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 2 \\ 1 & 0 & 2 & 0 \end{bmatrix}$ |  | 9 | 0.717% | Pyramid |
| 5 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 2 \\ 0 & 2 & 0 & 2 \\ 1 & 2 & 2 & 0 \end{bmatrix}$ |  | 500 | 0.536% | Circle, Clique |
| 6 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 2 \\ 0 & 2 & 0 & 2 \\ 1 & 3 & 2 & 0 \end{bmatrix}$ |  | 1632 | 0.468% | Circle, Clique |
| 7 | $\begin{bmatrix} 0 & 0 & 2 & 2 \\ 0 & 0 & 2 & 2 \\ 2 & 2 & 0 & 2 \\ 2 & 2 & 2 & 0 \end{bmatrix}$ |  | 18241 | 0.255% | |
| 8 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 2 \\ 0 & 2 & 0 & 2 \\ 1 & 3 & 3 & 0 \end{bmatrix}$ |  | 7556 | 0.229% | Circle, Clique |
| 9 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 1 & 1 & 0 \end{bmatrix}$ |  | 38 | 0.149% | Circle, Clique |
| 10 | $\begin{bmatrix} 0 & 2 & 2 & 2 \\ 2 & 0 & 2 & 2 \\ 2 & 2 & 0 & 2 \\ 3 & 2 & 2 & 0 \end{bmatrix}$ |  | - | 0.134% | Clique |
| 11 | $\begin{bmatrix} 0 & 2 & 0 & 0 \\ 2 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 \\ 1 & 1 & 2 & 0 \end{bmatrix}$ |  | 611 | 0.127% | Circle, Clique |
| 12 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 \\ 1 & 1 & 0 & 0 \end{bmatrix}$ |  | 363 | 0.126% | Circle |

Figure 57: Ratio and concentration of size 4 motifs in the multiplex network (part 1)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|--|-------|-------|---------------|----------------|
| 13 | $\begin{bmatrix} 0 & 2 & 2 & 0 \\ 2 & 0 & 2 & 0 \\ 2 & 2 & 0 & 0 \\ 1 & 0 & 0 & 0 \end{bmatrix}$ | | 352 | 0.121% | Circle, Clique |
| 14 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 2 \\ 1 & 1 & 2 & 0 \end{bmatrix}$ | | - | 0.1% | |
| 15 | $\begin{bmatrix} 0 & 0 & 0 & 2 \\ 0 & 0 & 2 & 0 \\ 0 & 2 & 0 & 0 \\ 3 & 1 & 1 & 0 \end{bmatrix}$ | | 986 | 0.096% | Circle, Clique |
| 16 | $\begin{bmatrix} 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 2 \\ 2 & 0 & 0 & 2 \\ 3 & 2 & 2 & 0 \end{bmatrix}$ | | 334 | 0.092% | Circle, Clique |
| 17 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 1 & 0 & 0 & 2 \\ 1 & 1 & 3 & 0 \end{bmatrix}$ | | 776 | 0.089% | Circle, Clique |
| 18 | $\begin{bmatrix} 0 & 0 & 2 & 2 \\ 0 & 0 & 2 & 0 \\ 2 & 2 & 0 & 2 \\ 3 & 0 & 2 & 0 \end{bmatrix}$ | | 178 | 0.087% | Circle, Clique |
| 19 | $\begin{bmatrix} 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 \\ 3 & 1 & 1 & 0 \end{bmatrix}$ | | 181 | 0.081% | Circle, Clique |
| 20 | $\begin{bmatrix} 0 & 2 & 2 & 0 \\ 2 & 0 & 2 & 0 \\ 2 & 2 & 0 & 0 \\ 1 & 1 & 1 & 0 \end{bmatrix}$ | | - | 0.077% | Clique |
| 21 | $\begin{bmatrix} 0 & 2 & 2 & 0 \\ 2 & 0 & 2 & 0 \\ 2 & 2 & 0 & 0 \\ 1 & 1 & 0 & 0 \end{bmatrix}$ | | - | 0.07% | |
| 22 | $\begin{bmatrix} 0 & 2 & 2 & 2 \\ 2 & 0 & 2 & 2 \\ 2 & 2 & 0 & 2 \\ 3 & 3 & 2 & 0 \end{bmatrix}$ | | - | 0.067% | Clique |
| 23 | $\begin{bmatrix} 0 & 0 & 0 & 2 \\ 0 & 0 & 2 & 2 \\ 0 & 2 & 0 & 2 \\ 3 & 2 & 2 & 0 \end{bmatrix}$ | | 193 | 0.063% | Circle, Clique |
| 24 | $\begin{bmatrix} 0 & 2 & 0 & 2 \\ 2 & 0 & 0 & 2 \\ 0 & 0 & 0 & 2 \\ 3 & 3 & 2 & 0 \end{bmatrix}$ | | 2683 | 0.044% | Circle, Clique |

Figure 58: Ratio and concentration of size 4 motifs in the multiplex network (part 2)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|--|-------|-------|---------------|---------------|
| 25 | $\begin{bmatrix} 0 & 2 & 2 & 2 \\ 2 & 0 & 0 & 0 \\ 2 & 0 & 0 & 2 \\ 3 & 0 & 2 & 0 \end{bmatrix}$ | | 160 | 0.044% | Circle,Clique |
| 26 | $\begin{bmatrix} 0 & 2 & 2 & 2 \\ 2 & 0 & 2 & 2 \\ 2 & 2 & 0 & 2 \\ 3 & 3 & 3 & 0 \end{bmatrix}$ | | - | 0.043% | Clique |
| 27 | $\begin{bmatrix} 0 & 2 & 0 & 2 \\ 2 & 0 & 2 & 2 \\ 0 & 2 & 0 & 0 \\ 3 & 3 & 0 & 0 \end{bmatrix}$ | | 551 | 0.033% | Circle,Clique |
| 28 | $\begin{bmatrix} 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 0 \\ 2 & 1 & 0 & 2 \\ 3 & 0 & 2 & 0 \end{bmatrix}$ | | 1778 | 0.033% | Circle,Clique |
| 29 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 0 & 3 & 0 & 0 \\ 1 & 1 & 1 & 0 \end{bmatrix}$ | | 163 | 0.032% | Circle,Clique |
| 30 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 0 & 2 & 0 & 2 \\ 1 & 1 & 2 & 0 \end{bmatrix}$ | | 15 | 0.032% | Circle,Clique |
| 31 | $\begin{bmatrix} 0 & 2 & 2 & 2 \\ 2 & 0 & 2 & 0 \\ 2 & 2 & 0 & 0 \\ 3 & 0 & 0 & 0 \end{bmatrix}$ | | 88 | 0.031% | Circle,Clique |
| 32 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 \\ 1 & 1 & 1 & 0 \end{bmatrix}$ | | 11490 | 0.027% | |
| 33 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 1 & 0 & 0 & 2 \\ 1 & 1 & 2 & 0 \end{bmatrix}$ | | 48 | 0.026% | Circle,Clique |
| 34 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 \\ 1 & 0 & 0 & 0 \\ 1 & 2 & 1 & 0 \end{bmatrix}$ | | 93 | 0.022% | Circle,Clique |
| 35 | $\begin{bmatrix} 0 & 2 & 0 & 0 \\ 2 & 0 & 2 & 0 \\ 0 & 2 & 0 & 0 \\ 1 & 1 & 0 & 0 \end{bmatrix}$ | | 42 | 0.02% | Circle,Clique |
| 36 | $\begin{bmatrix} 0 & 2 & 2 & 2 \\ 2 & 0 & 0 & 2 \\ 2 & 0 & 0 & 2 \\ 3 & 2 & 2 & 0 \end{bmatrix}$ | | - | 0.019% | |

Figure 59: Ratio and concentration of size 4 motifs in the multiplex network (part 3)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|--|-------|-------|---------------|---------------|
| 37 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 2 \\ 1 & 2 & 0 & 2 \\ 0 & 2 & 3 & 0 \end{bmatrix}$ | | 1013 | 0.019% | Circle,Clique |
| 38 | $\begin{bmatrix} 0 & 2 & 0 & 0 \\ 2 & 0 & 0 & 2 \\ 0 & 0 & 0 & 2 \\ 1 & 3 & 2 & 0 \end{bmatrix}$ | | 328 | 0.017% | Circle,Clique |
| 39 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 2 \\ 1 & 1 & 3 & 0 \end{bmatrix}$ | | - | 0.016% | |
| 40 | $\begin{bmatrix} 0 & 2 & 2 & 0 \\ 2 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 \\ 1 & 1 & 1 & 0 \end{bmatrix}$ | | - | 0.014% | |
| 41 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 1 & 3 & 0 & 0 \\ 1 & 1 & 0 & 0 \end{bmatrix}$ | | 949 | 0.013% | Circle |
| 42 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 0 & 3 & 0 & 2 \\ 1 & 1 & 3 & 0 \end{bmatrix}$ | | 1374 | 0.013% | Circle,Clique |
| 43 | $\begin{bmatrix} 0 & 0 & 2 & 2 \\ 0 & 0 & 2 & 2 \\ 2 & 2 & 0 & 2 \\ 3 & 2 & 2 & 0 \end{bmatrix}$ | | - | 0.013% | |
| 44 | $\begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 \\ 1 & 0 & 0 & 2 \\ 1 & 2 & 3 & 0 \end{bmatrix}$ | | 881 | 0.012% | Circle,Clique |
| 45 | $\begin{bmatrix} 0 & 2 & 0 & 2 \\ 2 & 0 & 2 & 2 \\ 0 & 2 & 0 & 2 \\ 3 & 3 & 2 & 0 \end{bmatrix}$ | | - | 0.011% | |
| 46 | $\begin{bmatrix} 0 & 0 & 0 & 2 \\ 0 & 0 & 2 & 2 \\ 0 & 2 & 0 & 2 \\ 3 & 3 & 2 & 0 \end{bmatrix}$ | | 139 | 0.011% | Circle,Clique |
| 47 | $\begin{bmatrix} 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 0 \\ 2 & 1 & 0 & 2 \\ 2 & 1 & 2 & 0 \end{bmatrix}$ | | - | 0.01% | |
| 48 | $\begin{bmatrix} 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 2 \\ 2 & 0 & 0 & 2 \\ 1 & 2 & 2 & 0 \end{bmatrix}$ | | 25 | 0.01% | Circle,Clique |

Figure 60: Ratio and concentration of size 4 motifs in the multiplex network (part 4)

A.2.3 Size 5

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|--------|---------------|------|
| 1 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 1 & 1 & 0 & 0 & 0 \end{bmatrix}$ | | 642 | 0.623% | |
| 2 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 57 | 0.488% | |
| 3 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 1 & 0 & 0 & 0 \\ 1 & 1 & 1 & 1 & 0 & 0 \end{bmatrix}$ | | 584907 | 0.391% | |
| 4 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 1 & 1 & 1 & 0 & 0 \end{bmatrix}$ | | 28619 | 0.114% | |
| 5 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 1 & 0 & 0 & 0 \\ 1 & 1 & 1 & 1 & 0 & 0 \end{bmatrix}$ | | - | 0.029% | |
| 6 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & 1 & 0 & 0 & 0 \\ 1 & 1 & 0 & 1 & 0 & 0 \end{bmatrix}$ | | 10 | 0.015% | |

Figure 61: Ratio and concentration of size 5 motifs in the ownership network

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|-------|---------------|--------|
| 1 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 1 & 1 & 0 \\ 0 & 1 & 0 & 1 & 1 \\ 0 & 1 & 1 & 0 & 1 \\ 1 & 0 & 1 & 1 & 0 \end{bmatrix}$ | | 66 | 2.133% | |
| 2 | $\begin{bmatrix} 0 & 0 & 0 & 1 & 1 \\ 0 & 0 & 1 & 1 & 1 \\ 0 & 1 & 0 & 1 & 1 \\ 1 & 1 & 1 & 0 & 1 \\ 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 82 | 2.039% | |
| 3 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 & 1 \\ 0 & 0 & 0 & 1 & 1 \\ 0 & 1 & 1 & 0 & 1 \\ 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 20 | 1.362% | |
| 4 | $\begin{bmatrix} 0 & 0 & 1 & 1 & 1 \\ 0 & 0 & 1 & 1 & 1 \\ 1 & 1 & 0 & 1 & 1 \\ 1 & 1 & 1 & 0 & 1 \\ 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 63435 | 1.007% | |
| 5 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 & 1 \\ 0 & 0 & 0 & 1 & 1 \\ 0 & 1 & 1 & 0 & 0 \\ 1 & 1 & 1 & 0 & 0 \end{bmatrix}$ | | 20 | 0.301% | Circle |
| 6 | $\begin{bmatrix} 0 & 0 & 1 & 0 & 1 \\ 0 & 0 & 0 & 1 & 1 \\ 1 & 0 & 0 & 1 & 1 \\ 0 & 1 & 1 & 0 & 1 \\ 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 43 | 0.294% | |
| 7 | $\begin{bmatrix} 0 & 0 & 0 & 1 & 1 \\ 0 & 0 & 0 & 1 & 1 \\ 0 & 0 & 0 & 1 & 1 \\ 1 & 1 & 1 & 0 & 1 \\ 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 11421 | 0.159% | |

Figure 62: Ratio and concentration of size 5 motifs in the interlocks network (part 1)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|-------|---------------|--------|
| 8 | $\begin{bmatrix} 0 & 1 & 0 & 1 & 0 \\ 1 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 & 1 \\ 1 & 0 & 1 & 0 & 1 \\ 0 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 18 | 0.091% | |
| 9 | $\begin{bmatrix} 0 & 1 & 1 & 0 & 0 \\ 1 & 0 & 0 & 1 & 1 \\ 1 & 0 & 0 & 1 & 1 \\ 0 & 1 & 1 & 0 & 1 \\ 0 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | - | 0.021% | |
| 10 | $\begin{bmatrix} 0 & 1 & 1 & 0 & 0 \\ 1 & 0 & 0 & 1 & 0 \\ 1 & 0 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 1 & 0 \end{bmatrix}$ | | 24 | 0.018% | Circle |

Figure 63: Ratio and concentration of size 5 motifs in the interlocks network (part 2)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|-------|---------------|---------------|
| 1 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 0 \\ 0 & 0 & 2 & 0 & 0 \\ 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 269 | 1.932% | Circle,Clique |
| 2 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 2 \\ 1 & 1 & 0 & 2 & 0 \end{bmatrix}$ | | 10 | 0.868% | Pyramid |
| 3 | $\begin{bmatrix} 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 2 \\ 3 & 1 & 1 & 2 & 0 \end{bmatrix}$ | | 2346 | 0.673% | Circle,Clique |
| 4 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 2 & 0 & 2 \\ 1 & 1 & 2 & 2 & 0 \end{bmatrix}$ | | 873 | 0.559% | Circle,Clique |
| 5 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & 0 \\ 1 & 1 & 1 & 0 & 0 \end{bmatrix}$ | | 172 | 0.361% | Circle |
| 6 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 0 \\ 0 & 1 & 2 & 0 & 2 \\ 1 & 0 & 0 & 2 & 0 \end{bmatrix}$ | | 9 | 0.3% | Pyramid |
| 7 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 2 & 0 & 2 \\ 1 & 1 & 3 & 3 & 0 \end{bmatrix}$ | | 8770 | 0.257% | Circle,Clique |

Figure 64: Ratio and concentration of size 5 motifs in the multiplex network (part 1)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|--------|---------------|----------------|
| 8 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 & 0 \\ 0 & 2 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 2 \\ 1 & 1 & 1 & 2 & 0 \end{bmatrix}$ | | 306 | 0.216% | Circle, Clique |
| 9 | $\begin{bmatrix} 0 & 2 & 2 & 2 & 2 \\ 2 & 0 & 2 & 2 & 2 \\ 2 & 2 & 0 & 2 & 2 \\ 2 & 2 & 2 & 0 & 2 \\ 2 & 2 & 2 & 2 & 0 \end{bmatrix}$ | | - | 0.194% | Clique |
| 10 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 & 0 \\ 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 23 | 0.181% | Circle, Clique |
| 11 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 2 & 0 \\ 0 & 2 & 0 & 2 & 0 \\ 0 & 2 & 2 & 0 & 0 \\ 1 & 1 & 1 & 0 & 0 \end{bmatrix}$ | | 285266 | 0.158% | |
| 12 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 2 & 0 \\ 0 & 2 & 0 & 2 & 0 \\ 0 & 2 & 2 & 0 & 0 \\ 1 & 1 & 0 & 0 & 0 \end{bmatrix}$ | | 969 | 0.146% | Circle, Clique |
| 13 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 1 & 0 & 2 \\ 1 & 1 & 1 & 2 & 0 \end{bmatrix}$ | | - | 0.126% | |
| 14 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 1 & 0 & 0 \\ 1 & 1 & 1 & 0 & 0 \end{bmatrix}$ | | 40572 | 0.123% | |

Figure 65: Ratio and concentration of size 5 motifs in the multiplex network (part 2)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|-------|---------------|---------------|
| 15 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 2 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 0 \\ 0 & 0 & 2 & 0 & 0 \\ 3 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 316 | 0.104% | Circle,Clique |
| 16 | $\begin{bmatrix} 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 2 & 1 & 0 & 0 & 0 \\ 2 & 0 & 1 & 0 & 0 \end{bmatrix}$ | | 10 | 0.092% | Pyramid |
| 17 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 & 2 \\ 1 & 1 & 1 & 3 & 0 \end{bmatrix}$ | | 468 | 0.089% | Circle,Clique |
| 18 | $\begin{bmatrix} 0 & 2 & 0 & 0 & 2 \\ 2 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 3 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 110 | 0.086% | Circle,Clique |
| 19 | $\begin{bmatrix} 0 & 0 & 2 & 2 & 2 \\ 0 & 0 & 2 & 0 & 0 \\ 2 & 2 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 2 \\ 2 & 0 & 0 & 2 & 0 \end{bmatrix}$ | | 33 | 0.081% | Circle,Clique |
| 20 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 2 & 2 \\ 0 & 2 & 2 & 0 & 2 \\ 1 & 0 & 2 & 2 & 0 \end{bmatrix}$ | | 112 | 0.077% | Circle,Clique |
| 21 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 2 & 0 \\ 0 & 2 & 0 & 2 & 0 \\ 0 & 2 & 2 & 0 & 0 \\ 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | - | 0.077% | Clique |

Figure 66: Ratio and concentration of size 5 motifs in the multiplex network (part 3)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|---------|---------------|---------------|
| 22 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 2 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 2 \\ 1 & 3 & 0 & 2 & 0 \end{bmatrix}$ | | 7 | 0.076% | Pyramid |
| 23 | $\begin{bmatrix} 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 0 & 2 \\ 2 & 2 & 0 & 0 & 2 \\ 2 & 0 & 2 & 2 & 0 \end{bmatrix}$ | | 11 | 0.069% | Circle,Clique |
| 24 | $\begin{bmatrix} 0 & 2 & 2 & 2 & 2 \\ 2 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 2 & 2 \\ 2 & 0 & 2 & 0 & 2 \\ 2 & 0 & 2 & 2 & 0 \end{bmatrix}$ | | 2235624 | 0.069% | Clique |
| 25 | $\begin{bmatrix} 0 & 2 & 2 & 2 & 2 \\ 2 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 2 \\ 2 & 0 & 0 & 2 & 0 \end{bmatrix}$ | | 13 | 0.056% | Circle,Clique |
| 26 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 2 \\ 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 2 & 0 & 2 \\ 1 & 2 & 2 & 2 & 0 \end{bmatrix}$ | | 156 | 0.052% | Circle,Clique |
| 27 | $\begin{bmatrix} 0 & 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 2 \\ 1 & 1 & 1 & 2 & 0 \end{bmatrix}$ | | 12 | 0.047% | Circle,Clique |
| 28 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & 0 \\ 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 3987 | 0.044% | |

Figure 67: Ratio and concentration of size 5 motifs in the multiplex network (part 4)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|--------|---------------|---------------|
| 29 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 1 & 0 & 2 \\ 1 & 0 & 0 & 3 & 0 \end{bmatrix}$ | | 7 | 0.039% | Pyramid |
| 30 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 0 \\ 1 & 1 & 2 & 0 & 0 \\ 1 & 1 & 0 & 0 & 0 \end{bmatrix}$ | | 305 | 0.039% | Circle |
| 31 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 2 \\ 1 & 0 & 0 & 0 & 0 \\ 1 & 1 & 2 & 1 & 0 \end{bmatrix}$ | | 47 | 0.037% | Circle,Clique |
| 32 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 0 \\ 0 & 0 & 3 & 0 & 0 \\ 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 91 | 0.036% | Circle,Clique |
| 33 | $\begin{bmatrix} 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 2 & 1 & 0 & 0 & 2 \\ 2 & 0 & 1 & 2 & 0 \end{bmatrix}$ | | 2019 | 0.035% | Circle,Clique |
| 34 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & 2 \\ 1 & 1 & 1 & 2 & 0 \end{bmatrix}$ | | 7664 | 0.034% | |
| 35 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & 2 \\ 1 & 1 & 1 & 3 & 0 \end{bmatrix}$ | | 133710 | 0.033% | |

Figure 68: Ratio and concentration of size 5 motifs in the multiplex network (part 5)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|-------|---------------|----------------|
| 36 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 2 & 2 \\ 0 & 2 & 0 & 2 & 0 \\ 0 & 2 & 2 & 0 & 0 \\ 1 & 2 & 0 & 0 & 0 \end{bmatrix}$ | | 183 | 0.033% | Circle, Clique |
| 37 | $\begin{bmatrix} 0 & 0 & 2 & 2 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 \\ 1 & 1 & 1 & 0 & 0 \end{bmatrix}$ | | 20 | 0.031% | Circle, Clique |
| 38 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 2 & 2 \\ 0 & 2 & 0 & 2 & 2 \\ 0 & 2 & 2 & 0 & 2 \\ 1 & 3 & 2 & 2 & 0 \end{bmatrix}$ | | - | 0.03% | Clique |
| 39 | $\begin{bmatrix} 0 & 2 & 2 & 2 & 2 \\ 2 & 0 & 2 & 0 & 0 \\ 2 & 2 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 2 \\ 2 & 0 & 0 & 2 & 0 \end{bmatrix}$ | | 23978 | 0.027% | |
| 40 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 2 & 2 \\ 0 & 2 & 0 & 2 & 2 \\ 0 & 2 & 2 & 0 & 2 \\ 1 & 3 & 3 & 2 & 0 \end{bmatrix}$ | | - | 0.027% | Clique |
| 41 | $\begin{bmatrix} 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 2 & 2 & 2 \\ 0 & 2 & 0 & 2 & 2 \\ 2 & 2 & 2 & 0 & 2 \\ 2 & 2 & 2 & 2 & 0 \end{bmatrix}$ | | - | 0.026% | |
| 42 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 & 0 \\ 0 & 2 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 2 \\ 1 & 0 & 0 & 2 & 0 \end{bmatrix}$ | | 8 | 0.025% | Pyramid |

Figure 69: Ratio and concentration of size 5 motifs in the multiplex network (part 6)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|--------|---------------|---------------|
| 43 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 0 \\ 1 & 0 & 3 & 0 & 0 \\ 1 & 1 & 1 & 0 & 0 \end{bmatrix}$ | | 527 | 0.022% | Circle |
| 44 | $\begin{bmatrix} 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 2 & 2 & 2 \\ 0 & 2 & 0 & 0 & 0 \\ 2 & 2 & 0 & 0 & 2 \\ 2 & 2 & 0 & 2 & 0 \end{bmatrix}$ | | 2087 | 0.02% | |
| 45 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 2 & 2 \\ 0 & 2 & 0 & 2 & 2 \\ 0 & 2 & 2 & 0 & 2 \\ 1 & 2 & 2 & 2 & 0 \end{bmatrix}$ | | - | 0.019% | Clique |
| 46 | $\begin{bmatrix} 0 & 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 3 & 1 & 1 & 0 & 0 \\ 1 & 1 & 1 & 0 & 0 \end{bmatrix}$ | | 200136 | 0.019% | |
| 47 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 2 & 0 \\ 0 & 2 & 2 & 0 & 2 \\ 1 & 3 & 0 & 2 & 0 \end{bmatrix}$ | | 198 | 0.019% | Circle,Clique |
| 48 | $\begin{bmatrix} 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 2 & 1 & 1 & 0 & 2 \\ 2 & 1 & 1 & 2 & 0 \end{bmatrix}$ | | - | 0.017% | |
| 49 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 & 2 \\ 0 & 2 & 0 & 2 & 2 \\ 0 & 0 & 2 & 0 & 0 \\ 1 & 3 & 3 & 0 & 0 \end{bmatrix}$ | | 1534 | 0.016% | Circle,Clique |

Figure 70: Ratio and concentration of size 5 motifs in the multiplex network (part 7)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|-------|---------------|----------------|
| 50 | $\begin{bmatrix} 0 & 0 & 0 & 2 & 0 \\ 0 & 0 & 2 & 0 & 0 \\ 0 & 2 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 \\ 1 & 1 & 1 & 0 & 0 \end{bmatrix}$ | | 202 | 0.016% | Circle, Clique |
| 51 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 2 \\ 1 & 0 & 0 & 0 & 2 \\ 1 & 1 & 2 & 3 & 0 \end{bmatrix}$ | | 606 | 0.016% | Circle, Clique |
| 52 | $\begin{bmatrix} 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 3 & 1 & 1 & 0 & 2 \\ 3 & 1 & 1 & 2 & 0 \end{bmatrix}$ | | - | 0.016% | |
| 53 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 2 & 2 \\ 0 & 2 & 0 & 0 & 0 \\ 0 & 2 & 0 & 0 & 2 \\ 1 & 3 & 0 & 2 & 0 \end{bmatrix}$ | | 305 | 0.016% | Circle, Clique |
| 54 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 2 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & 0 \\ 3 & 1 & 1 & 0 & 0 \end{bmatrix}$ | | 755 | 0.015% | Circle |
| 55 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 0 & 2 \\ 0 & 2 & 0 & 0 & 2 \\ 1 & 3 & 2 & 2 & 0 \end{bmatrix}$ | | 198 | 0.015% | Circle, Clique |
| 56 | $\begin{bmatrix} 0 & 0 & 2 & 2 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 \\ 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 5851 | 0.015% | |

Figure 71: Ratio and concentration of size 5 motifs in the multiplex network (part 8)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|--------|---------------|----------------|
| 57 | $\begin{bmatrix} 0 & 2 & 2 & 2 & 2 \\ 2 & 0 & 2 & 2 & 2 \\ 2 & 2 & 0 & 2 & 2 \\ 2 & 2 & 2 & 0 & 0 \\ 2 & 2 & 2 & 0 & 0 \end{bmatrix}$ | | - | 0.014% | |
| 58 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 2 & 1 & 0 & 2 \\ 1 & 3 & 0 & 2 & 0 \end{bmatrix}$ | | 3386 | 0.014% | Circle, Clique |
| 59 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 3 & 0 & 2 \\ 1 & 1 & 2 & 2 & 0 \end{bmatrix}$ | | 2011 | 0.013% | Circle, Clique |
| 60 | $\begin{bmatrix} 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 2 & 0 & 0 \\ 0 & 2 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 2 \\ 3 & 1 & 1 & 2 & 0 \end{bmatrix}$ | | - | 0.013% | |
| 61 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 1 & 0 & 0 \\ 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 413857 | 0.013% | |
| 62 | $\begin{bmatrix} 0 & 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 2 \\ 1 & 1 & 1 & 3 & 0 \end{bmatrix}$ | | 796 | 0.013% | Circle, Clique |
| 63 | $\begin{bmatrix} 0 & 0 & 2 & 2 & 0 \\ 0 & 0 & 0 & 0 & 2 \\ 2 & 0 & 0 & 2 & 0 \\ 2 & 0 & 2 & 0 & 0 \\ 1 & 2 & 0 & 0 & 0 \end{bmatrix}$ | | 550 | 0.012% | Circle, Clique |

Figure 72: Ratio and concentration of size 5 motifs in the multiplex network (part 9)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|--------|---------------|---------------|
| 64 | $\begin{bmatrix} 0 & 0 & 2 & 0 & 2 \\ 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 2 \\ 3 & 1 & 1 & 2 & 0 \end{bmatrix}$ | | 125 | 0.012% | Circle,Clique |
| 65 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 2 \\ 0 & 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 2 & 2 \\ 0 & 2 & 2 & 0 & 2 \\ 3 & 0 & 2 & 2 & 0 \end{bmatrix}$ | | 59 | 0.012% | Circle,Clique |
| 66 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 2 \\ 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 2 & 0 & 2 \\ 1 & 3 & 2 & 2 & 0 \end{bmatrix}$ | | 141 | 0.012% | Circle,Clique |
| 67 | $\begin{bmatrix} 0 & 2 & 2 & 2 & 2 \\ 2 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 2 & 2 \\ 2 & 0 & 2 & 0 & 0 \\ 2 & 0 & 2 & 0 & 0 \end{bmatrix}$ | | 922 | 0.011% | |
| 68 | $\begin{bmatrix} 0 & 2 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 2 \\ 0 & 0 & 2 & 0 & 2 \\ 1 & 0 & 2 & 2 & 0 \end{bmatrix}$ | | 469 | 0.011% | Circle,Clique |
| 69 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 2 \\ 0 & 0 & 2 & 2 & 0 \\ 0 & 2 & 0 & 2 & 0 \\ 0 & 2 & 2 & 0 & 0 \\ 3 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | - | 0.011% | Clique |
| 70 | $\begin{bmatrix} 0 & 2 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 0 \\ 0 & 0 & 2 & 0 & 0 \\ 1 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 113400 | 0.01% | |

Figure 73: Ratio and concentration of size 5 motifs in the multiplex network (part 10)

| ID | Adjacency Matrix | Motif | Ratio | Concentration | Type |
|----|---|-------|-------|---------------|---------------|
| 71 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 & 2 \\ 0 & 2 & 0 & 0 & 2 \\ 0 & 0 & 0 & 0 & 2 \\ 1 & 3 & 3 & 2 & 0 \end{bmatrix}$ | | 1615 | 0.01% | Circle,Clique |
| 72 | $\begin{bmatrix} 0 & 0 & 0 & 0 & 2 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 \\ 3 & 1 & 1 & 1 & 0 \end{bmatrix}$ | | 28 | 0.01% | Circle,Clique |
| 73 | $\begin{bmatrix} 0 & 0 & 2 & 0 & 0 \\ 0 & 0 & 0 & 2 & 2 \\ 2 & 0 & 0 & 0 & 0 \\ 0 & 2 & 0 & 0 & 2 \\ 1 & 3 & 0 & 2 & 0 \end{bmatrix}$ | | 1571 | 0.01% | Circle,Clique |

Figure 74: Ratio and concentration of size 5 motifs in the multiplex network (part 11)