Index	C1	C2	C3	C4	C5	C6
DC	0.74-0.78	0.70-0.75	0.63-0.72	0.36-0.46	0.36-0.47	0.09-0.15
wDC	0.93-0.94	0.84-0.86	0.76-0.83	0.59-0.66	0.54-0.61	0.24-0.32
CC	0.73-0.77	0.70-0.75	0.61-0.73	0.34-0.45	0.36-0.45	0.03-0.10
BC	0.74-0.80	0.68-0.78	0.68-0.73	0.43-0.50	0.29-0.39	0.00-0.00
s	0.91-0.94	0.86-0.89	0.82-0.89	0.77-0.83	0.71-0.77	0.17-0.28
s'	0.88-0.91	0.86-0.91	0.86-0.90	0.76-0.79	0.67-0.75	0.21-0.32
Δs	0.87-0.91	0.86-0.89	0.83-0.89	0.75-0.79	0.71-0.78	0.20-0.32
k	0.70-0.74	0.70-0.75	0.57-0.69	0.24-0.38	0.23-0.36	0.01-0.07
k_{bu}	0.90-0.92	0.85-0.87	0.77-0.83	0.70-0.76	0.68-0.77	0.15-0.23
k_{td}	0.81-0.84	0.80-0.83	0.73-0.83	0.67-0.71	0.48-0.57	0.18-0.30
k_{dir}	0.65-0.70	0.63-0.68	0.54-0.64	0.17-0.33	0.13-0.28	0.03-0.07
k_{indir}	0.72-0.76	0.70-0.75	0.60-0.71	0.39-0.47	0.32-0.45	0.01-0.07
TI^1	0.80-0.83	0.77-0.81	0.61-0.72	0.46-0.53	0.41-0.54	0.12-0.17
TI^3	0.85-0.88	0.79-0.83	0.67-0.78	0.52-0.62	0.52-0.57	0.15-0.23
TI^5	0.87-0.89	0.80-0.83	0.70-0.79	0.52-0.63	0.52-0.58	0.15-0.23
WI^1	0.80-0.84	0.77-0.81	0.61-0.76	0.45-0.54	0.40-0.53	0.11-0.19
WI^3	0.85-0.88	0.79-0.83	0.69-0.78	0.51-0.61	0.50-0.57	0.14-0.23
WI^5	0.87-0.90	0.79-0.83	0.67-0.81	0.52-0.64	0.50-0.58	0.15-0.23
STO^1	0.89-0.92	0.77-0.81	0.69-0.79	0.57-0.69	0.56-0.62	0.05-0.10
STO^3	0.89-0.91	0.77-0.82	0.65-0.79	0.55-0.65	0.56-0.61	0.04-0.08
STO^5	0.87-0.90	0.75-0.80	0.67-0.78	0.56-0.62	0.55-0.64	0.05-0.09
$wSTO^1$	0.85-0.89	0.79-0.83	0.67-0.78	0.56-0.62	0.53-0.63	0.05-0.13
$wSTO^3$	0.84-0.87	0.79-0.84	0.64-0.77	0.55-0.62	0.49-0.60	0.08-0.14
$wSTO^5$	0.83-0.86	0.79-0.85	0.66-0.78	0.56-0.63	0.45-0.57	0.07-0.14

Table S1. Confidence intervals of the mean Kendalls in Table 1 of the paper. Green = hierarchical clustering with Jaccard index, red = hierarchical clustering with REGE index, grey = density-based modules, yellow = prey-based modules, blue = predator-based modules, purple = groups produced by the group model. C1 = Best clustering, C2 = second best clustering, C3 = third best clustering, C4 = fourth best clustering, C5 = fifth best clustering, C6 = sixth best clustering.

Index	C1	C2	C3	C4	C5	C6
DC	50%	50%	50%	50%	25%	25%
wDC	50% mean	50% mean	25% sum	NMAX mean	NMAX mean	NMAX sum
CC	50%	50%	50%	50%	25%	25%
BC	50%	50%	50%	25%	25%	25%
s	NMAX	NMAX	25%	NMAX	25%	NMAX
s'	25%	25%	NMAX	25%	NMAX	25%
Δs	25%	NMAX	25%	25%	NMAX	NMAX
k	50%	50%	50%	25%	25%	NMAX
k_{bu}	25%	50%	25%	25%	25%	NMAX
k_{td}	25%	50%	50%	25%	25%	25%
k_{dir}	50%	50%	50%	50%	50%	25%
k_{indir}	50%	50%	50%	25%	25%	NMAX
TI^1	50%	50%	50%	NMAX	25%	NMAX
TI^3	50%	NMAX	50%	NMAX	NMAX	NMAX
TI^5	25%	25%	25%	NMAX	NMAX	NMAX
WI^1	50% mean	50% mean	50% mean	NMAX max	25% mean	NMAX sum
WI^3	50% mean	NMAX mean	50% mean	NMAX mean	NMAX mean	NMAX mean
WI^5	25% mean	25% mean	25% mean	NMAX mean	NMAX mean	NMAX mean
STO^1	25%	50%	50%	25%	25%	25%
STO^3	25%	50%	50%	25%	25%	25%
STO^5	25%	50%	50%	25%	25%	25%
$wSTO^1$	25% mean	50% max	50% mean	25% min	25% mean	25% min
$wSTO^3$	25% mean	50% mean	50% max	25% mean	25% mean	25% max
$wSTO^5$	25% mean	50% mean	50% mean	25% mean	25% mean	NMAX sum

Table S2. Combination of linkage method and interaction strength method that gave us the highest Kendall's correlation coefficient in Table 1 of the paper. Most of the cells do not containi the interaction strength method because they are computed upon a binary network. Green = hierarchical clustering with Jaccard index, red = hierarchical clustering with REGE index, grey = density-based modules, yellow = prey-based modules, blue = predator-based modules, purple = groups produced by the group model. C1 = Best clustering, C2 = second best clustering, C3 = third best clustering, C4 = fourth best clustering, C5 = fifth best clustering, C6 = sixth best clustering.