

Lower bound l	5% NCS				KMEANS
	PCCC	PCCC-S	PCCC-W	CSC-W	
0.5	0.44	0.49	0.53	-0.01	0.53
0.6	0.43	0.49	0.52	-0.01	0.53
0.7	0.44	0.50	0.52	-0.01	0.53
0.8	0.49	0.57	0.55	-0.01	0.53
0.9	0.49	0.56	0.56	0.00	0.53
1.0	0.52	0.58	0.58	-0.01	0.53
Mean	0.47	0.53	0.54	-0.01	0.53

Table W43: Average Adjusted Rand Index (ARI) values of three versions of the PCCC algorithm and the state-of-the-art algorithm CSC-W obtained with noisy constraint sets of size 5% NCS. Higher values indicate more overlap with the ground truth assignment. The highest values are stated in bold. The column KMEANS reports the average ARI values that were obtained with the unconstrained k-means algorithm.

Lower bound l	10% NCS				KMEANS
	PCCC	PCCC-S	PCCC-W	CSC-W	
0.5	0.34	0.48	0.52	0.01	0.53
0.6	0.43	0.62	0.60	0.05	0.53
0.7	0.49	0.67	0.64	0.13	0.53
0.8	0.55	0.70	0.69	0.30	0.53
0.9	0.46	0.71	0.73	0.32	0.53
1.0	0.78	0.81	0.81	0.33	0.53
Mean	0.51	0.66	0.67	0.19	0.53

Table W44: Average Adjusted Rand Index (ARI) values of three versions of the PCCC algorithm and the state-of-the-art algorithm CSC-W obtained with noisy constraint sets of size 10% NCS. Higher values indicate more overlap with the ground truth assignment. The highest values are stated in bold. The column KMEANS reports the average ARI values that were obtained with the unconstrained k-means algorithm.

Lower bound l	15% NCS				KMEANS
	PCCC	PCCC-S	PCCC-W	CSC-W	
0.5	–	0.42	0.68	0.31	0.53
0.6	–	0.52	0.68	0.33	0.53
0.7	–	0.70	0.77	0.32	0.53
0.8	0.54	0.73	0.77	0.46	0.53
0.9	0.58	0.84	0.85	0.55	0.53
1.0	0.92	0.90	0.90	0.69	0.53
Mean	0.34*	0.68	0.77	0.44	0.53

*Nan values (–) are replaced with 0 before computing the mean.

Table W45: Average Adjusted Rand Index (ARI) values of three versions of the PCCC algorithm and the state-of-the-art algorithm CSC-W obtained with noisy constraint sets of size 15% NCS. Higher values indicate more overlap with the ground truth assignment. The highest values are stated in bold. The column KMEANS reports the average ARI values that were obtained with the unconstrained k-means algorithm.

Lower bound l	20% NCS				KMEANS
	PCCC	PCCC-S	PCCC-W	CSC-W	
0.5	–	0.52	0.72	0.35	0.53
0.6	–	0.64	0.75	0.44	0.53
0.7	–	0.72	0.79	0.73	0.53
0.8	–	0.80	0.84	0.76	0.53
0.9	–	0.89	0.90	0.79	0.53
1.0	0.97	0.96	0.96	0.81	0.53
Mean	0.16*	0.76	0.83	0.65	0.53

*Nan values (–) are replaced with 0 before computing the mean.

Table W46: Average Adjusted Rand Index (ARI) values of three versions of the PCCC algorithm and the state-of-the-art algorithm CSC-W obtained with noisy constraint sets of size 20% NCS. Higher values indicate more overlap with the ground truth assignment. The highest values are stated in bold. The column KMEANS reports the average ARI values that were obtained with the unconstrained k-means algorithm.