

Dataset	50% CS		KMEANS
	PCCC	PCCC-N2-S	
n300-k10-s10	22.0	0.6	0.0
n300-k10-s20	45.2	2.2	0.0
n300-k10-s30	26.6	2.9	0.1
n300-k10-s40	37.4	7.8	0.0
n300-k10-s50	84.9	36.1	0.0
n300-k20-s10	1,918.4	1.2	0.0
n300-k20-s20	2,680.7	8.6	0.0
n300-k20-s30	3,610.8	17.4	0.0
n300-k20-s40	3,610.6	24.0	0.0
n300-k20-s50	3,608.7	39.0	0.0
n300-k50-s10	599.0	1.0	0.1
n300-k50-s20	1,673.8	1.4	0.1
n300-k50-s30	1,492.9	1.3	0.0
n300-k50-s40	2,962.5	1.7	0.1
n300-k50-s50	3,625.7	1.9	0.1
Sum	25,999.2	147.0	0.7

Table W74: Average running times (in seconds) of the PCCC and the PCCC-N2-S algorithms for the constraint sets of size 50% CS. The lowest values are stated in bold. The column KMEANS reports the average running time of the unconstrained k-means algorithm. The hyphen indicates that the respective algorithm returned no solution within the time limit of 3,600 seconds.