Dataset	Objects	Features	Clusters	5% CS							
				PCCC-N2-S	PCCC-N5-S	PCCC-N2-S-RD	COPKM	LCC	CSC	DILS	KMEANS
Banana	5,300	2	2	0.3	**0.2**	0.3	–	–	4,386.9	4,283.3	0.1
Letter	20,000	16	26	**127.5**	345.1	640.3	–	–	–	4,109.1	0.5
Shuttle	57,999	9	7	**24.2**	24.8	25.9	–	–	–	–	0.4
CIFAR 10	60,000	3,072	10	**22.1**	71.2	22.3	–	–	–	–	16.8
CIFAR 100	60,000	3,072	100	715.6	**664.9**	2,893.6	–	–	–	–	84.5
MNIST	70,000	784	10	28.0	36.5	**27.4**	–	–	–	–	4.3
Sum				**917.6**	1,142.8	3,609.8	21,600.0*	21,600.0*	22,386.9*	22,792.4*	106.6

*Nan values (–) are replaced with 3,600 before computing the sum.

Table W119: Average running times (in seconds) of the versions of the PCCC algorithm and the four state-of-the-art algorithms (COPKM, CSC, DILS, LCC) for the constraint sets of size 5% CS. Higher values indicate better separated clusters. 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 1,800 seconds.