Table 1: STANDARD DEVIATIONS OF ALL THE METHODS ON THE ELEVEN DATA SETS WHILE THE INCOMPLETE LABEL RATIO IS 30%

Method	$AUC\uparrow$										
	Corel5k	Corel16k1	Corel16k2	ESP Game	Bibtex	Arts	Business	Education	Science	Stackexchess	Yeast
MSWL	0.006	0.002	0.002	0.004	0.004	0.005	0.003	0.002	0.007	0.007	0.005
ML^2	0.006	0.002	0.003	0.003	0.003	0.005	0.005	0.006	0.004	0.050	0.030
MLML	0.005	0.001	0.004	0.007	0.006	0.006	0.003	0.005	0.009	0.006	0.004
GLOCAL	0.004	0.001	0.002	0.004	0.003	0.005	0.002	0.002	0.007	0.005	0.005
ESMC	0.004	0.003	0.001	0.002	0.003	0.002	0.006	0.007	0.005	0.007	0.010
Method	Coverage↓										
	Corel5k	Corel16k1	Corel16k2	ESP Game	Bibtex	Arts	Business	Education	Science	Stackexchess	Yeast
MSWL	0.413	0.469	0.504	0.218	0.937	0.205	0.085	0.116	0.353	2.499	0.150
ML^2	0.485	1.657	0.901	0.137	0.810	0.078	0.145	0.248	0.332	13.697	0.441
MLML	0.469	0.365	0.738	0.321	0.885	0.124	0.165	0.188	0.469	2.137	0.089
GLOCAL	0.303	0.227	0.717	0.283	0.669	0.070	0.094	0.126	0.352	2.469	0.116
ESMC	0.307	0.725	0.495	0.128	0.554	0.093	0.211	0.287	0.222	3.424	0.216
Method	Ranking loss↓										
	Corel5k	Corel16k1	Corel16k2	ESP Game	Bibtex	Arts	Business	Education	Science	Stackexchess	Yeast
MSWL	0.006	0.002	0.003	0.004	0.004	0.005	0.002	0.003	0.007	0.007	0.004
ML^2	0.007	0.002	0.003	0.004	0.004	0.002	0.003	0.005	0.005	0.049	0.031
MLML	0.004	0.002	0.003	0.007	0.006	0.005	0.003	0.005	0.010	0.007	0.005
GLOCAL	0.003	0.002	0.003	0.004	0.002	0.001	0.002	0.003	0.005	0.007	0.005
ESMC	0.004	0.003	0.001	0.003	0.003	0.003	0.005	0.005	0.005	0.008	0.009
Method	Average precision↑										
	Corel5k	Corel16k1	Corel16k2	ESP Game	Bibtex	Arts	Business	Education	Science	Stackexchess	Yeast
MSWL	0.006	0.003	0.008	0.006	0.005	0.004	0.010	0.005	0.013	0.008	0.005
ML^2	0.007	0.031	0.005	0.007	0.006	0.003	0.006	0.005	0.010	0.080	0.038
MLML	0.004	0.003	0.004	0.005	0.009	0.011	0.005	0.008	0.013	0.008	0.010
GLOCAL	0.008	0.004	0.004	0.004	0.008	0.009	0.004	0.005	0.014	0.013	0.008
ESMC	0.007	0.005	0.004	0.006	0.009	0.009	0.009	0.013	0.007	0.012	0.005

Table 2: STANDARD DEVIATIONS OF ALL THE METHODS ON THE ELEVEN DATA SETS WHILE THE INCOMPLETE LABEL RATIO IS 70%

Method	$AUC\uparrow$											
	Corel5k	Corel16k1	Corel16k2	ESP Game	Bibtex	Arts	Business	Education	Science	Stackexchess	Yeast	
MSWL	0.005	0.003	0.002	0.002	0.002	0.002	0.003	0.005	0.005	0.015	0.004	
ML^2	0.010	0.013	0.050	0.004	0.003	0.004	0.006	0.008	0.009	0.011	0.009	
MLML	0.003	0.005	0.002	0.004	0.008	0.005	0.004	0.006	0.009	0.016	0.005	
GLOCAL	0.003	0.001	0.002	0.005	0.005	0.007	0.005	0.003	0.008	0.003	0.009	
ESMC	0.002	0.003	0.003	0.003	0.005	0.006	0.005	0.004	0.007	0.005	0.005	
M-41 J	$Coverage \downarrow$											
Method	Corel5k	Corel16k1	Corel16k2	ESP Game	Bibtex	Arts	Business	Education	Science	Stackexchess	Yeast	
MSWL	0.322	0.561	0.356	0.095	0.603	0.135	0.169	0.182	0.207	6.269	0.173	
ML^2	0.749	5.537	11.515	0.210	0.634	0.233	0.285	0.400	0.372	3.003	0.128	
MLML	0.198	0.891	0.563	0.207	1.051	0.181	0.251	0.242	0.447	5.092	0.137	
GLOCAL	0.237	0.348	0.690	0.352	0.986	0.285	0.170	0.134	0.365	1.878	0.081	
ESMC	0.213	0.865	0.490	0.276	1.155	0.196	0.221	0.111	0.302	4.485	0.145	
Method	Ranking loss↓											
Method	Corel5k	Corel16k1	Corel16k2	ESP Game	Bibtex	Arts	Business	Education	Science	Stackexchess	Yeast	
MSWL	0.007	0.002	0.003	0.003	0.002	0.003	0.002	0.003	0.004	0.015	0.004	
ML^2	0.011	0.014	0.051	0.004	0.004	0.007	0.006	0.008	0.008	0.011	0.009	
MLML	0.003	0.005	0.002	0.003	0.008	0.004	0.005	0.004	0.008	0.018	0.007	
GLOCAL	0.004	0.001	0.003	0.005	0.002	0.007	0.003	0.002	0.007	0.004	0.008	
ESMC	0.003	0.003	0.003	0.005	0.006	0.006	0.005	0.003	0.005	0.009	0.006	
Method	Average precision↑											
	Corel5k	Corel16k1	Corel16k2	ESP Game	Bibtex	Arts	Business	Education	Science	Stackexchess	Yeast	
MSWL	0.007	0.005	0.005	0.004	0.011	0.010	0.006	0.013	0.010	0.016	0.009	
ML^2	0.016	0.033	0.029	0.001	0.011	0.011	0.009	0.010	0.009	0.025	0.009	
MLML	0.005	0.006	0.005	0.005	0.007	0.005	0.007	0.010	0.011	0.012	0.011	
GLOCAL	0.008	0.004	0.005	0.007	0.013	0.011	0.005	0.010	0.010	0.014	0.012	
ESMC	0.007	0.002	0.003	0.005	0.007	0.012	0.005	0.005	0.019	0.012	0.009	