Table 1:

Final maximin regret/dataset	IMLinUCB	IMLinUCB-FW	IMFB	IMFB-FW	CUCB	CUCB-FW	ϵ-gred	ϵ-gred-FW
pokec	5.08± 0.16	0.12± 0.008	2.95± 0.30	0.08± 0.34	9.10± 0.49	0.39± 0.13	10.42 ± 0.21	0.61± 0.21
bail	1.87± 0.03	0.50± 0.06	4.05± 0.18	0.07± 0.02	21.085 ± 0.66	0.11± 0..02	27.25 ± 0.58	0.33± 0.11
german	44.27± 2.09	32.33± 0.13	2.61± 0.37	1.33± 0.08	1.44± 0.51	1.17± 0.19	4.05± 0.51	2.61± 0.02

Table 2:

Final welfare regret(alpha=2)/dataset	IMLinUCB	IMLinUCB-FW	IMFB	IMFB-FW	CUCB	CUCB-FW	ϵ-gred	ϵ-gred-FW
pokec	7241.75± 254.33	133.6± 19.88	136.83 ± 50.85	49.82 ± 10.09	12530.01 ± 231.77	244.02 ± 37.11	14720.88 ± 233.51	4886± 294.00
bail	21944.96 ± 100.89	552.86± 21.00	1747.43 ± 206.54	742.39 ± 40.88	196292.60 ± 4105.88	3556.61 ± 63.93	240386.97 ± 10339.79	44893.83 ± 3766.20
german	14011.87± 2041.44	10548.99± 1035.47	662.76 ± 177.29	744.18 ± 197.11	607.64± 164.09	1073.29 ± 441.20	1117.88± 279.98	931.73± 199.76

Table 3:

	IMLinUCB	IMLinUCB-MIP	IMFB	IMFB-MIP	CUCB	CUCB-MIP	ϵ-gred	ϵ
Maximin	7.69	0.66	7.70	1.12	9.11	1.31	8.92	0
Diversity	379640	86410	290017	38666	337787	25055	405019	9
Welfare (alpha=2)	4559944.78	670012.36	3249013.44	729916.76	2980099.17	794457.1	3802188.09	1
Welfare (alpha=0.5)	3105772.80	540007.77	1699921.00	344523.00	1445772.92	312235.29	2339158.61	7
Welfare (alpha=-2)	18708994.68	1089348.65	8980091.90	951428.09	69034889.79	458012.45	92158872.73	9

Figure 1:
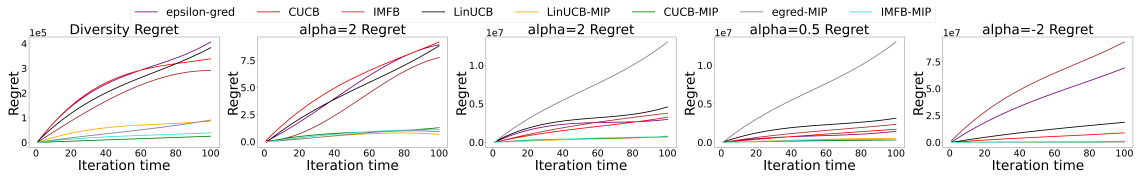
Dataset details

For the dataset processing of Youtube dataset, we constructed the node features with the outer product of the node ID and community ID (which group the node beongs and the community is the sensitive attribute). We also use jaccard similarity between node feature as the ground truth diffusion probability and remain the rest superparameter unchanged