

	Dataset	Category	$ G $	$\ G\ $	δ	\bar{d}	Δ	degn	% V_2	diam	γ	mac
Small	p8808mo10	cDBG	28,793	34,534	1	2.40	7	3	61%	469	8,830	1.08
	5032-01	cDBG	45,070	66,527	1	2.95	8	4	41%	103	?	?
	twofoo	cDBG	49,043	59,648	1	2.43	8	3	62%	1,455	14,606	1.11
	ca-GrQc	collab	4,158	13,422	1	6.46	81	43	35%	17	776	1.32
	ca-CondMat	collab	21,363	91,286	1	8.55	279	25	21%	15	2,990	1.46
	delaunay-n13	DIM	8,192	24,547	3	5.99	12	4	0%	49	?	?
	wing-nodal	DIM	10,937	75,488	5	13.80	28	8	0%	26	?	?
	fe-4elt2	DIM	11,143	32,818	3	5.89	12	4	0%	121	?	?
	delaunay-n14	DIM	16,384	49,122	3	6.00	16	4	0%	65	?	?
	fe-sphere	DIM	16,386	49,152	4	6.00	6	5	0%	128	?	?
	cti	DIM	16,840	48,232	3	5.73	6	4	0%	64	?	?
	cs4	DIM	22,499	43,858	2	3.90	4	3	0%	75	?	?
	delaunay-n15	DIM	32,768	98,274	3	6.00	18	4	0%	87	?	?
	hugebubbles	DIM	44,224	50,121	1	2.27	3	2	60%	1,065	14,424	1.05
	t60k	DIM	60,005	89,440	2	2.98	3	2	2%	649	?	?
Medium	6015-01	cDBG	108,141	154,774	1	2.86	8	4	44%	315	?	?
	PSM6XBSE	cDBG	219,634	261,016	1	2.38	8	3	64%	2,055	65,444	1.09
	HSMA331E	cDBG	486,485	575,888	1	2.37	8	3	64%	2,222	145,211	1.09
	ca-HepPh	collab	11,204	117,619	1	21.00	491	238	24%	13	1,662	1.51
	ca-AstroPh	collab	17,903	196,972	1	22.00	504	56	13%	14	2,055	1.74
	email-enron-large	email	33,696	180,811	1	10.73	1,383	43	38%	13	1,972	1.78
	inf-luxembourg-osm	DIM	114,599	119,666	1	2.09	6	2	89%	1,337	3,7752	1.02
Large	G36383	cDBG	1,000,794	1,247,578	1	2.49	8	4	59%	1,626	?	?
	CSM79HKX	cDBG	2,164,736	2,678,934	1	2.48	8	4	59%	1,776	?	?
	bgi-MH0078	cDBG	4,202,874	5,103,063	1	2.43	8	4	62%	4,365	?	?
	podarV	cDBG	7,205,871	8,767,362	1	2.43	8	4	63%	2,296	?	?
	hu-s1	cDBG	13,081,189	17,300,937	1	2.65	8	4	51%	347	?	?
	soc-BlogCatalog	social	88,784	2,093,195	1	47.15	9,444	221	34%	9	?	?
	soc-delicious	social	536,108	1,365,961	1	5.10	3,216	33	70%	14	?	?
	soc-flixster	social	2,523,386	7,918,801	1	6.28	1,474	68	74%	8	?	?
	soc-livejournal	social	4,033,137	27,933,062	1	13.85	2,651	213	33%	25	?	?

Table 2: This table gives details on the network corpus used in experiments, including category (cDBG: metagenomic cDBG, collab: collaboration, social: social networks, DIM: DIMACS10, email), number of vertices ($|G|$), number of edges ($\|G\|$), minimum degree (δ), average degree (\bar{d}), maximum degree (Δ), degeneracy (degn), percentage of the vertices with degree at most 2 (% V_2), diameter of the graph (diam), and the smallest size (γ)/average congestion (mac) of any dominating set. An entry of “?” indicates Gurobi timed out.