Appendix

This document contains the full table of results for the DIMACS graphs (Table 1 and 2), real-world graphs (Table 3), and random graphs (Table 4).

instances	$\|V\|$	$\|E\|$	density	opt	time (seconds)			tree size	
					MEWCat	MECQ	BBEWC	MEWCat	MECQ
brock200_1	200	14834	0.75	21230	**7.16**	26.06	19.94	1128966	6074449
brock200_2	200	9876	0.50	6542	0.07	0.09	**0.04**	6513	14073
brock200_3	200	12048	0.61	10303	**0.26**	0.43	0.35	40089	114928
brock200_4	200	13089	0.66	13967	**0.60**	1.19	1.09	90138	287037
brock400_1	400	59723	0.75	-	tle	tle	tle	inf	inf
brock400_2	400	59786	0.75	40738	**2659.44**	tle	tle	196906400	inf
brock400_3	400	59681	0.75	46785	**1301.82**	4120.80	tle	78401299	363627930
brock400_4	400	59765	0.75	54304	**743.35**	2158.84	tle	37082948	157841169
brock800_1	800	207505	0.65	-	tle	tle	tle	inf	inf
brock800_2	800	208166	0.65	-	tle	tle	tle	inf	inf
brock800_3	800	207333	0.65	-	tle	tle	tle	inf	inf
brock800_4	800	207643	0.65	-	tle	tle	tle	inf	inf
c-fat200-1	200	1534	0.08	7734	0.02	0.01	**0.00**	8	28
c-fat200-2	200	3235	0.16	26389	0.03	0.03	**0.00**	19	97
c-fat200-5	200	8473	0.43	168200	0.07	0.08	**0.00**	36	113
c-fat500-1	500	4459	0.04	10738	0.02	0.02	**0.00**	16	61
c-fat500-2	500	9139	0.07	38350	0.02	0.03	**0.00**	19	92
c-fat500-5	500	23191	0.19	205864	0.10	0.10	**0.01**	56	324
c-fat500-10	500	46627	0.37	804000	0.29	0.51	**0.05**	35	3853
C125.9	125	6963	0.90	66248	**4.13**	24.64	21.17	501549	4329351
C250.9	250	27984	0.90	-	tle	tle	tle	inf	inf
C500.9	500	112332	0.90	-	tle	tle	tle	inf	inf
C1000.9	1000	450079	0.90	-	tle	tle	tle	inf	inf
C2000.5	2000	999836	0.50	-	tle	tle	tle	inf	inf
C2000.9	2000	1799532	0.90	-	tle	tle	tle	inf	inf
C4000.5	4000	4000268	0.50	-	tle	tle	tle	inf	inf
DSJC500.5	500	62624	0.50	9626	**7.47**	10.27	11.14	1048222	2419493
DSJC1000.5	1000	249826	0.50	12054	**761.14**	1059.02	tle	86531251	200178248
gen200_p0.9_44	200	17910	0.90	94362	**748.29**	tle	4759.73	48670766	inf
gen200_p0.9_55	200	17910	0.90	150839	**9.98**	246.74	147.65	347373	13443080
gen400_p0.9_55	400	71820	0.90	-	tle	tle	tle	inf	inf
gen400_p0.9_65	400	71820	0.90	-	tle	tle	tle	inf	inf
gen400_p0.9_75	400	71820	0.90	-	tle	tle	tle	inf	inf

Table 1: Running times in seconds and tree sizes on DIMACS graphs (part 1/2). The best times are in bold. "tle" means time limit is exceeded, and the corresponding tree size is marked "inf" (infinite) in this case. Column opt is the weight of the maximum edge-weighted clique.

instances	$\|V\|$	$\|E\|$	density	opt	time (seconds)			tree size	
					MEWCat	MECQ	BBEWC	MEWCat	MECQ
hamming6-2	64	1824	0.90	32736	**0.02**	**0.02**	**0.02**	29	32
hamming6-4	64	704	0.35	396	0.01	0.01	**0.00**	159	265
hamming8-2	256	31616	0.97	800624	**1.22**	20.71	tle	12899	479056
hamming8-4	256	20864	0.64	12360	**0.52**	0.56	1.16	61307	86597
hamming10-2	1024	518656	0.99	-	tle	tle	tle	inf	inf
hamming10-4	1024	434176	0.83	-	tle	tle	tle	inf	inf
johnson8-2-4	28	210	0.56	192	**0.00**	**0.00**	**0.00**	58	79
johnson8-4-4	70	1855	0.77	6552	**0.01**	**0.01**	**0.01**	543	354
johnson16-2-4	120	5460	0.76	3808	0.71	**0.16**	0.68	869471	309697
johnson32-2-4	496	107880	0.88	-	tle	tle	tle	inf	inf
keller4	171	9435	0.65	6745	0.26	0.24	**0.22**	41286	61141
keller5	776	225990	0.75	-	tle	tle	tle	inf	inf
keller6	3361	4619898	0.82	-	tle	tle	tle	inf	inf
MANN_a9	45	918	0.93	5460	**0.04**	0.05	0.10	5852	35116
MANN_a27	378	70551	0.99	-	tle	tle	tle	inf	inf
MANN_a45	1035	533115	1.00	-	tle	tle	tle	inf	inf
MANN_a81	3321	5506380	1.00	-	tle	tle	tle	inf	inf
p_hat300-1	300	10933	0.24	3321	0.03	0.04	**0.01**	1976	3975
p_hat300-2	300	21928	0.49	31564	**0.43**	6.73	0.99	28010	876123
p_hat300-3	300	33390	0.74	63390	**108.02**	tle	tle	8976459	inf
p_hat500-1	500	31569	0.25	4764	0.11	0.13	**0.06**	10279	27485
p_hat500-2	500	62946	0.50	63870	**19.01**	2076.05	tle	1145621	175372574
p_hat500-3	500	93800	0.75	-	tle	tle	tle	inf	inf
p_hat700-1	700	60999	0.25	5185	**0.31**	0.41	**0.31**	39766	110426
p_hat700-2	700	121728	0.50	96380	**411.37**	tle	tle	21446468	inf
p_hat700-3	700	183010	0.75	-	tle	tle	tle	inf	inf
p_hat1000-1	1000	122253	0.24	5436	**1.39**	1.89	1.88	255163	582124
p_hat1000-2	1000	244799	0.49	-	tle	tle	tle	inf	inf
p_hat1000-3	1000	371746	0.74	-	tle	tle	tle	inf	inf
p_hat1500-1	1500	284923	0.25	7135	**12.44**	18.22	20.63	1829656	4552934
p_hat1500-2	1500	568960	0.51	-	tle	tle	tle	inf	inf
p_hat1500-3	1500	847244	0.75	-	tle	tle	tle	inf	inf
san200_0.7_1	200	13930	0.70	45295	**0.08**	0.16	1.34	787	6694
san200_0.7_2	200	13930	0.70	15073	**0.16**	2.43	1128.50	3616	335623
san200_0.9_1	200	17910	0.90	242710	**0.22**	38.87	1.73	4071	1637404
san200_0.9_2	200	17910	0.90	178468	**3.43**	89.96	50.16	103297	4463309
san200_0.9_3	200	17910	0.90	96764	**424.82**	5619.84	tle	24820484	510629937
san400_0.5_1	400	39900	0.50	7442	**0.41**	0.51	106.19	1661	11065
san400_0.7_1	400	55860	0.70	77719	**1.69**	15.93	tle	34074	547682
san400_0.7_2	400	55860	0.70	44155	**6.03**	53.14	tle	258568	2841349
san400_0.7_3	400	55860	0.70	24727	**24.08**	212.14	tle	1853272	20591310
san400_0.9_1	400	71820	0.90	496874	**2363.83**	tle	tle	25809889	inf
san1000	1000	250500	0.50	10661	**4.28**	22.13	tle	134797	345909
sanr200_0.7	200	13868	0.70	16398	**1.76**	4.16	3.98	277367	1045157
sanr200_0.9	200	17863	0.90	85920	**3263.35**	tle	tle	287114150	inf
sanr400_0.5	400	39984	0.50	8298	**2.06**	2.91	2.86	318597	835023
sanr400_0.7	400	55869	0.70	22791	**996.80**	2577.28	tle	129110468	495625041

Table 2: Running times in seconds and tree sizes on DIMACS graphs (part 2/2).

instances	$\|V\|$	$\|E\|$	density	opt	time (seconds)			tree size	
					MEWCat	MECQ	BBEWC	MEWCat	MECQ
socfb-UIllinois	31163	120029	0.000247	160092	**0.59**	40.66	60.63	895	2737715
cond-mat-2003	31163	120029	0.000247	42324	**0.14**	2.15	0.26	3	48
ia-email-EU	32430	54397	0.000103	8155	0.30	2.59	**0.07**	106	435
rgg_n_2_15_s0	32768	160240	0.000298	8058	**0.15**	2.30	0.33	14	322
ia-enron-large	33696	180811	0.000319	19860	**0.44**	2.90	0.52	583	10494
socfb-UF	35111	1465654	0.00238	149419	**1.08**	75.01	511.22	2135	3758446
socfb-Texas84	36364	1590651	0.00241	129925	**1.14**	274.00	323.86	1997	15847661
tech-internet-as	40164	85123	0.000106	13695	0.74	4.44	**0.16**	31	178
cond-mat-2005	40421	175691	0.000215	42324	**0.21**	3.79	0.45	5	109
sc-nasasrb	54870	1311227	0.000871	51040	**0.58**	8.05	2.95	2564	8652
soc-brightkite	56739	212945	0.000132	67102	**0.56**	9.66	5.16	456	174180
soc-loc-brightkite	58228	214078	0.000126	79678	**0.50**	9.49	7.72	112	111158
rgg_n_2_16_s0	65536	342127	0.000159	9711	**0.30**	10.30	1.33	45	334
soc-themarker	69413	1644843	0.000683	23605	**16.00**	342.23	906.03	118662	12809679
rec-eachmovie	74424	1634743	0.000590	7791	**11.33**	556.64	30.43	15973	58973
soc-Slashdot0811	77360	469180	0.000157	35450	**1.05**	16.73	5.03	699	68934
soc-Slashdot0902	82168	504230	0.000149	34951	**1.11**	19.09	8.00	1046	95550
sc-pkustk11	87804	2565054	0.000665	77580	**1.07**	22.18	8.54	3364	21103
ia-wiki-Talk	92117	360767	0.0000850	12422	**1.60**	23.75	3.22	1698	13917
sc-pkustk13	94893	3260967	0.000724	99915	**1.01**	26.06	14.52	2316	37629

Table 3: Running times in seconds and tree sizes on real-world graphs.

instances	opt	time (seconds)			tree size (millions)	
		MEWCat	MECQ	BBEWC	MEWCat	MECQ
(150, 0.7)	15081	**0.23**	0.50	0.41	0.0	0.1
(150, 0.8)	28192.4	**2.44**	9.13	6.64	0.4	2.1
(150, 0.9)	71549.3	**62.46**	766.16	190.98	7.1	122.1
(200, 0.7)	16333.1	**2.04**	5.18	4.51	0.3	1.4
(200, 0.8)	32071	**44.38**	217.07	182.12	6.1	45.1
(300, 0.6)	12444.2	**3.00**	4.98	5.49	0.5	1.2
(300, 0.7)	20943.1	**52.77**	124.22	154.90	6.9	24.8
(500, 0.4)	6015.7	**0.80**	0.84	0.98	0.1	0.3
(500, 0.5)	9184.8	**7.48**	10.02	11.81	1.1	2.6
(500, 0.6)	15267.8	**133.05**	235.83	303.56	16.6	46.9
(1000, 0.2)	3012.4	0.25	0.21	**0.16**	0.0	0.0
(1000, 0.3)	4974.7	2.16	**2.05**	3.03	0.4	0.7
(1000, 0.4)	7749.3	**30.34**	33.61	52.64	4.0	8.8
(3000, 0.1)	2265	0.90	**0.75**	0.90	0.2	0.2
(3000, 0.2)	4299.9	17.77	**15.56**	35.83	3.2	4.8
(5000, 0.1)	2684.5	6.28	**4.94**	6.15	0.6	0.8
(5000, 0.2)	4876.9	208.42	**165.13**	428.40	34.0	43.5
(10000, 0.1)	3320.8	80.97	**64.49**	128.66	3.4	8.0

Table 4: Running times in seconds and tree sizes in millions on random graphs. For each $(|V|, density)$, the value of opt, time and tree are averaged across 10 instances generated.