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Supplement to
POLYNOMIALS WITH SMALL MAHLER MEASURE

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Table 1. Mahler measures less than 1.24

d	Measure	ν	Half of coefficients
10	1.176280818260	1	1 1 0 −1 −1 −1
18	1.188368147508	1	1 1 1 1 0 0 −1 −1 −1 −1
14	1.200026523987	1	1 0 0 1 −1 0 0 −1
18	1.201396186235	2	1 1 1 0 0 −1 0 −1 0 −1
14	1.202616743689	1	1 0 −1 0 0 0 0 1
22	1.205019854225	2	1 0 1 0 0 1 −1 1 0 0 1 −1
28	1.207950028412	2	1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1
20	1.212824180989	2	1 1 0 0 1 1 0 −1 −1 −1 −1
20	1.214995700776	2	1 1 1 1 1 0 −1 −1 −1 −1 −1
10	1.216391661138	1	1 0 0 0 −1 1
20	1.218396362520	2	1 1 0 −1 0 0 0 −1 0 0 1
24	1.218855150304	2	1 0 0 0 0 1 0 −1 0 0 0 0 −1
24	1.219057507826	2	1 1 0 −1 −1 −1 −1 −1 0 1 1 1 1
18	1.219446875941	3	1 1 1 0 −1 −1 −1 0 0 1
18	1.219720859040	1	1 1 0 0 0 0 0 0 −1 −1
34	1.220287441693	3	1 0 1 0 0 1 −1 1 −1 0 0 −1 1 −1 0 0 −1 1
38	1.223447381419	3	1 1 0 −1 −1 0 0 −1 −1 0 1 1 0 0 1 1 0 −1 −1 −1
26	1.223777454948	3	1 1 1 0 0 −1 −1 −1 −1 0 0 1 0 1
16	1.224278907222	2	1 1 0 −1 −1 0 1 1 1
18	1.225503424104	2	1 1 0 0 1 0 −1 0 0 −1
30	1.225619851977	2	1 0 1 0 0 0 0 0 0 0 0 0 0 1 0 1
30	1.225810532354	3	1 0 1 0 0 0 −1 1 −1 1 −1 0 0 −1 1 −1
26	1.226092894512	2	1 0 0 1 0 0 0 0 0 0 1 0 0 1
36	1.226493301473	2	1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 −1 −1
20	1.226993758166	2	1 1 −1 −2 0 2 1 −1 −1 0 1
12	1.227785558695	2	1 1 1 0 −1 −1 −1
30	1.228140772740	3	1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 0 0 1
36	1.229482810173	4	1 1 1 0 0 −1 −1 −1 0 1 1 1 0 −1 −2 −1 0 1 1
22	1.229566456617	3	1 1 0 −1 −1 −1 −1 −1 0 1 1 1
34	1.229999039697	3	1 0 0 0 0 0 −1 0 0 0 0 1 0 0 0 0 0 −1
38	1.230263271363	3	1 0 0 0 −1 0 0 0 0 0 0 0 0 0 1 0 0 0 −1
42	1.230295468643	4	1 0 1 0 0 0 −1 1 −1 1 0 0 1 −1 1 −1 1 0 0 1 −1 1
10	1.230391434407	1	1 0 0 1 0 1
46	1.230743009076	3	1 0 0 1 0 1 0 0 1 0 0 0 0 0 0 −1 0 0 −1 0 −1 0 0 −1
18	1.231342769993	3	1 0 0 0 −1 1 0 0 0 −1
48	1.232202952743	4	1 1 0 0 1 1 0 −1 −1 0 0 −1 −1 0 1 1 0 0 1 1 0 −1 −1 −1 −1
20	1.232613548593	1	1 1 0 0 0 1 1 0 0 1 1
28	1.232628775929	2	1 2 2 1 1 1 0 −1 −1 −1 −1 −1 −1 −1 −1
38	1.233672001767	3	1 1 0 −1 −1 −1 −1 0 1 1 0 0 0 0 0 1 1 0 −1 −1
52	1.234348374876	4	1 1 0 −1 −1 0 0 −1 −1 0 1 1 0 0 1 1 0 −1 −1 0 0 −1 −1 0 1 1 1
24	1.234443834873	2	1 0 0 0 −1 0 −1 1 0 0 1 −1 1
26	1.234500336789	3	1 0 −1 1 0 −1 1 0 −1 1 0 −1 0 1
16	1.235256705642	2	1 1 0 0 0 −1 0 0 −1
46	1.235496042193	3	1 0 −1 0 0 0 0 1 0 −1 0 0 0 0 1 0 −1 0 0 0 0 1 0 −1
22	1.235664580390	1	1 0 −1 1 0 0 0 −1 1 0 −1 1
42	1.235761099712	4	1 0 0 0 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 1
32	1.236083368052	4	1 1 1 1 0 −1 −1 −2 −1 0 0 1 1 0 0 0 −1
32	1.236198469859	3	1 0 0 0 0 0 0 1 0 1 0 0 0 0 0 0 1
32	1.236227922245	4	1 2 2 1 0 −1 −1 −1 −1 −1 −1 −1 −1 −1 0 2 3
40	1.236249557349	3	1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 1
16	1.236317931803	1	1 1 0 0 0 0 0 0 −1
54	1.236566917569	5	1 0 1 0 0 0 −1 1 −1 1 0 0 1 −1 1 −1 0 0 −1 1 −1 1 −1 0 0 −1 1 −1
34	1.236579223637	3	1 0 0 0 0 1 0 0 0 0 0 0 −1 0 0 0 0 −1
44	1.236674812187	4	1 0 0 0 0 0 0 1 0 0 0 0 0 0 0 −1 0 0 0 0 0 0 −1
28	1.236808305865	2	1 1 0 −1 0 0 0 0 0 −1 0 0 0 0 1
26	1.237504821217	1	1 0 −1 0 0 1 0 0 −1 0 1 0 0 −1
46	1.237634830280	5	1 1 0 0 0 0 0 −1 −1 0 0 −1 −1 0 1 0 −1 0 1 1 0 −1 0 1
58	1.237684127894	5	1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 0 0 1
48	1.238040100176	4	1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 −1 0 0 0 0 −1
56	1.238431627359	4	1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1
56	1.238708978554	4	1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 −1 0 0 −1
42	1.239505770490	4	1 0 0 0 0 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 1
54	1.239747974875	6	1 1 1 0 0 −1 −1 −1 0 0 0 0 1 1 1 1 1 0 −1 −2 −2 −2 −1 0 1 1 1 1
48	1.239861326360	4	1 2 3 3 2 0 −2 −3 −3 −2 −1 0 0 −1 −2 −2 −1 0 1 1 1 1 1 1 1

TABLE 2. Smallest known Mahler measures by degree (minimal Mahler measure for $d \leq 24$)

d	Measure	ν	Half of coefficients
8	1.280638156268	1	1 0 0 1 −1
10	1.176280818260	1	1 1 0 −1 −1 −1
12	1.227785558695	2	1 1 1 0 −1 −1 −1
14	1.200026523987	1	1 0 0 1 −1 0 0 −1
16	1.224278907222	2	1 1 0 −1 −1 0 1 1 1
18	1.188368147508	1	1 1 1 1 0 0 −1 −1 −1 −1
20	1.212824180989	2	1 1 0 0 1 1 0 −1 −1 −1 −1
22	1.205019854225	2	1 0 1 0 0 1 −1 1 0 0 1 −1
24	1.218855150304	2	1 0 0 0 0 1 0 −1 0 0 0 0 −1
26	1.223777454948	3	1 1 1 0 0 −1 −1 −1 −1 0 0 1 0 1
28	1.207950028412	2	1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1
30	1.225619851977	2	1 0 1 0 0 0 0 0 0 0 0 0 0 1 0 1
32	1.236083368052	4	1 1 1 1 0 −1 −1 −2 −1 0 0 1 1 0 0 0 −1
34	1.220287441693	3	1 0 1 0 0 1 −1 1 −1 0 0 −1 1 −1 0 0 −1 1
36	1.226493301473	2	1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 −1 −1
38	1.223447381419	3	1 1 0 −1 −1 0 0 −1 −1 0 1 1 0 0 1 1 0 −1 −1 −1
40	1.236249557349	3	1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 1
42	1.230295468643	4	1 0 1 0 0 0 −1 1 −1 1 0 0 1 −1 1 −1 1 0 0 1 −1 1
44	1.236674812187	4	1 0 0 0 0 0 0 1 0 0 0 0 0 0 0 −1 0 0 0 0 0 0 −1
46	1.230743009076	3	1 0 0 1 0 1 0 0 1 0 0 0 0 0 0 −1 0 0 −1 0 −1 0 0 −1
48	1.232202952743	4	1 1 0 0 1 1 0 −1 −1 0 0 −1 −1 0 1 1 0 0 1 1 0 −1 −1 −1 −1
50	1.240379074717	3	1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 −1 −1
52	1.234348374876	4	1 1 0 −1 −1 0 0 −1 −1 0 1 1 0 0 1 1 0 −1 −1 0 0 −1 −1 0 1 1 1
54	1.236566917569	5	1 0 1 0 0 0 −1 1 −1 1 0 0 1 −1 1 −1 0 0 −1 1 −1 1 −1 0 0 −1 1 −1
56	1.238431627359	4	1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1
58	1.237684127894	5	1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 0 0 1
60	1.240061859037	4	1 0 0 1 0 1 0 0 1 0 0 0 0 0 0 −1 0 0 −1 0 −1 0 0 −1 0 0 0 0 0 0 1
62	1.244598861428	6	1 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1
64	1.246918808403	4	1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 −1 −1
66	1.245397804852	7	1 0 1 0 0 0 −1 0 −1 0 0 0 1 1 1 1 0 0 −1 −1 −1 −1 −1 0 0 1 1 1 1 0 0 −1 −1 −1
68	1.241372531335	6	1 1 0 0 0 0 1 0 −1 0 0 0 0 −1 0 1 0 0 0 0 1 0 −1 0 0 0 0 −1 0 1 0 −1 −1 0 1
70	1.241422024928	5	1 1 0 −1 −1 −1 −1 0 1 1 0 0 0 0 0 1 1 0 −1 −1 −1 −1 0 1 1 0 0 0 0 0 1 1 0 −1 −1 −1
72	1.241788568356	6	1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 1 1 1 0 0 0 −1 0 0 −1
74	1.246055240158	7	1 0 0 0 0 0 0 0 0 0 −1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 −1
76	1.242775741593	5	1 0 0 1 0 1 0 0 1 0 0 0 0 0 0 −1 0 0 −1 0 −1 0 0 −1 0 0 0 0 0 0 1 0 0 1 0 1 0 0 1
78	1.245376549311	8	1 0 1 0 0 0 −1 0 −1 0 0 0 1 1 1 1 0 0 −1 −1 −1 −1 0 0 1 1 1 1 1 0 0 −1 −1 −1 −1 0 0 1 1 1
80	1.245374741297	6	1 1 0 −1 −1 0 0 −1 −1 0 1 1 0 0 1 1 0 −1 −1 0 0 −1 −1 0 1 1 0 0 1 1 0 −1 −1 0 0 −1 −1 0 1 1 1
82	1.244967734300	8	1 0 1 0 0 0 −1 0 −1 0 0 1 1 1 1 0 0 −1 −1 −1 −1 0 0 1 1 1 1 0 0 −1 −1 −1 0 0 1 1 1 1 0 0 −1 −1
84	1.247632944895	8	1 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 −1 0 0 0 0 0 0 0 0 0 0 −1
86	1.244953592390	7	1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 0 0 1
88	1.245922202165	8	1 1 0 0 0 0 0 −1 0 1 0 0 0 0 1 0 −1 0 0 0 0 −1 0 1 0 0 0 0 1 0 −1 0 0 0 0 −1 0 1 0 −1 −1 0 1 0 −1
90	1.246403127917	9	1 0 1 0 0 0 −1 0 −1 0 0 0 1 1 1 1 0 0 −1 −1 −1 −1 0 0 1 1 1 1 0 0 −1 −1 −1 −1 −1 0 0 1 1 1 1 0 0 −1 −1 −1
92	1.252142335381	8	1 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 −1 0 0 0 0 0 0 −1
94	1.247133538468	9	1 0 1 0 0 0 −1 0 −1 0 0 1 1 1 1 0 0 −1 −1 −1 −1 0 0 1 1 1 1 0 0 −1 −1 −1 −1 0 0 1 1 1 0 0 −1 −1 −1 −1 0 0 1 1
96	1.247821565271	10	1 1 1 1 0 0 −1 −2 −2 −2 −1 0 1 1 2 2 1 1 −1 −1 −1 −2 −1 −1 0 1 1 1 1 1 0 0 −1 −1 0 −1 0 0 0 1 1 1 1 1 0 0 −1 −2 −1
98	1.247395763109	9	1 1 0 0 0 0 0 −1 −1 −1 −1 0 0 0 1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 0 0 1 0 0 0 −1
100	1.247365098370	8	1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 1 1 1 0 0 0 −1 −1 −1 −1 0 0 0 1 1 1 1 0 0 0 −1 0 0 −1

Table 3. Number of primitive, irreducible polynomials found with measure < 1.3 classified by degree and the number of roots outside the unit disk

d	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
8	1																			1
10	5	2																		7
12	1	4																		5
14	4	5	2																	11
16	1	12		1																14
18	7	8	8																	23
20	4	22	3	6																35
22	4	12	27	4	1															48
24	2	29	3	11		1														46
26	7	11	21	11	11															61
28	1	15	14	28	1															59
30	4	10	36	20	8	2														80
32		12	8	35	7	7														69
34	2	5	24	19	30	8	2													90
36	1	15	11	36	4	20		1												88
38		1	18	18	29	8	12													86
40	1	9	7	32	10	23	2	3												87
42			11	14	16	6	8	2												57
44	1	2	4	29	5	25	4	7												77
46	1	1	10	13	36	11	23	7	3											105
48		2	4	24	4	24	1	19	1											79
50			4	10	15	14	16	9	8											76
52			2	7	8	21	4	16	4	3										65
54				4	14	15	14	3	15	1										66
56				6	5	16	7	11	4	6										55
58			3	1	15	12	21	9	25	9	4									99
60			2	5	4	19	4	13		18										65
62			1		10	12	20	7	19	9	13									91
64				7	2	8	6	17	5	16	5	3								69
66			1		5	5	11	11	7		6									46
68			1	1	2	11	11	12	3	12	5	10								68
70					7	9	24	16	21	7	26	7	5							122
72				1	1	10	2	18		8		17								57
74					3	4	15	12	15	6	17	10	10							92
76				1	2	7	9	13	8	11	3	18	5	3						80
78					2	4	10	12	15		12	2	13	2						72
80				3		6	4	16	4	11	2	12	7	10						75
82					2	1	11	11	21	12	16	8	30	11	3					126
84					1	5	3	10	4	12	1	7		18						61
86				2	1	2	11	7	22	11	10	6	19	10	16					117
88						2	2	13	4	16	6	10	4	17	4	3				81
90						1	6	3	13	11	12	2	8	1	11	2				70
92						1	2	4	6	9	5	10	3	15	7	9				71
94							6	9	14	14	25	7	14	9	34	10	5			147
96						4	2	11	3	16	2	10		6		18		1		73
98					1		3	4	12	10	18	10	10	6	15	10	11			110
100					1	1	1	4	7	10	9	14	2	13	6	25	4	4		101
102							3	6	8	5	17	8	5	2	13	2	16	2		87
104						1		5	3	8	5	14	4	5	4	12	6	10		77
106					1		2	4	11	8	19	12	18	5	14	8	28	8	2	140
Total	47	177	225	349	264															

TABLE 3. (Continued)

d	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
108	1	1	2	1	11	2	13	4	11		8		22													76
110		2	2	10	4	15	14	16	4	13	7	21	10	18												136
112			4	3	11	4	14	5	10	2	8	6	19	4	4											94
114		1	2	7	5	9	10	17	6	5	1	7	2	13	2											87
116	1		4	2	4	5	10	7	11	3	7	3	13	8	8											86
118				6	6	18	10	27	11	17	7	16	9	34	13	8										182
120			4	1	10	2	10	3	14		11		13		26		1									95
122			1	4	4	10	8	19	11	11	5	9	10	19	12	11										134
124				2	4	4	4	9	15	7	10	4	10	4	22	6	2									103
126			1	4	5	8	4	11	13	13		6		8		12										85
128		1		1	2	3	9	4	14	6	9	2	7	6	12	8	14									98
130				6	2	13	10	17	14	20	6	14	6	15	10	36	12	3								184
132					4	3	8	2	14	5	10		10		14		23									93
134				1	4	7	6	14	9	24	10	8	5	15	7	22	14	20								166
136	1			1	4	3	10	4	10	6	18	4	4	3	7	6	19	5	1							106
138				2	1	3	8	10	7	17	7	7	2	5	2	9	1	15	3							99
140				1	4	1	7	4	8	7	12	3	8	3	8	3	15	6	14							104
142					2	9	7	13	9	24	19	23	3	14	7	19	13	41	12	5						220
144					3	1	8	1	9	3	17	2	9		8		12		22		1					96
146					1	4	2	14	8	12	16	21	5	9	5	11	7	18	15	14						162
148						2	3	6	8	6	12	10	6	3	11	3	13	6	27	6	4					126
150					3	5	2	11	4	10	9	19	6	3		8	1	11	2	19	2					115
152					1	2	5	2	8	4	8	6	14	3	7	3	5	5	11	8	13					105
154						5	5	9	9	16	10	23	15	11	4	14	7	14	8	35	12	4				201
156					1	1	4	2	7	2	14	5	13	1	7		9		14		24					104
158						3	3	9	6	13	10	22	14	17	5	13	5	14	9	25	14	22				204
160						1	4	1	13	3	10	6	20	5	9	1	10	4	9	4	27	6	4			137
162						3	3	4	6	8	4	13	13	14	2	4	1	8	2	10	2	16	3			116
164							3	3	2	4	9	6	14	7	10	3	6	3	9	5	13	9	12			118
166						1	2	10	6	15	7	18	14	30	8	14	5	12	6	18	11	39	10	5		231
168						1	5	1	7	2	11	2	17	4	14		10		7		14		29		1	125
170						1	3	4	5	10	6	13	10	20	7	7	5	7	5	12	8	21	14	15		173
172						1	1	1	6	5	9	6	8	12	15	3	8	4	10	3	13	6	29	7	3	150
174								3	3	10	6	11	7	17	12	11	1	8	1	9	2	9	2	23	3	138
176							2	2	1	3	6	3	6	4	10	6	4	2	3	3	6	6	10	8	8	93
178							1	4	5	8	6	12	9	17	14	16	3	9	6	10	6	18	11	34	11	200
180							1	1	2	1	2	2	5	3	7	2	2		2		3		5		7	45
Total	329	287	345	337	355	388	416	431	439	442	426	403	383	351	309	259	228	215	198	186	175	156	129	92	33	8374