

Supplement to “Two-Disk Compound Symmetry Groups”

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Critical Radii up to $n = 100$

Table 1: *Critical radii for GG_n .*

n	Numerical estimate	n	Numerical estimate	n	Numerical estimate	n	Numerical estimate
5	2.148961	30	1.043758	54	1.013437	78	1.006465
7	1.623574	31	1.040158	55	1.012954	79	1.006302
8	1.711411	32	1.037741	56	1.012498	80	1.006146
9	1.408482	33	1.035512	57	1.012067	81	1.005996
10	1.543357	34	1.033498	58	1.011657	82	1.005851
11	1.290582	35	1.031647	59	1.011267	83	1.005712
12	1.376547	36	1.030127	60	1.010908	84	1.005578
13	1.213594	37	1.028368	61	1.010545	85	1.005447
14	1.196554	38	1.026958	62	1.010210	86	1.005321
15	1.163276	39	1.025591	63	1.009890	87	1.005200
16	1.148470	40	1.024352	64	1.009585	88	1.005083
17	1.127509	41	1.023174	65	1.009294	89	1.004970
18	1.121505	42	1.022142	66	1.009018	90	1.004860
19	1.104246	43	1.021105	67	1.008750	91	1.004754
20	1.100581	44	1.020197	68	1.008499	92	1.004652
21	1.086016	45	1.019279	69	1.008253	93	1.004552
22	1.078162	46	1.018459	70	1.008020	94	1.004456
23	1.072011	47	1.017692	71	1.007797	95	1.004363
24	1.071404	48	1.016968	72	1.007582	96	1.004273
25	1.061321	49	1.016287	73	1.007377	97	1.004186
26	1.056958	50	1.015651	74	1.007180	98	1.004101
27	1.052668	51	1.015053	75	1.006990	99	1.004019
28	1.049731	52	1.014492	76	1.006809	100	1.003939
29	1.045731	53	1.013942	77	1.006633		

Characteristic Fractals up to $n = 20$

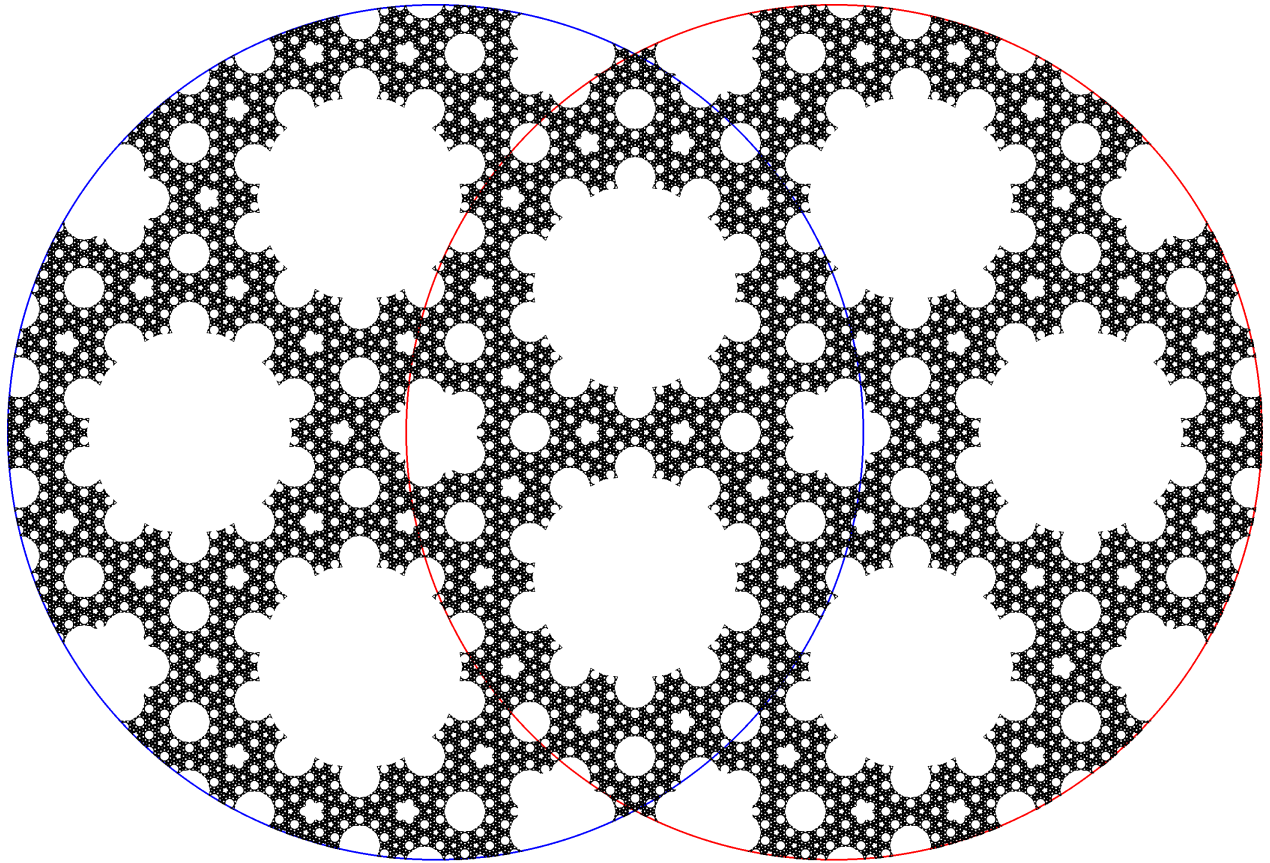


Figure 1: $GG_5(2.148958)$.

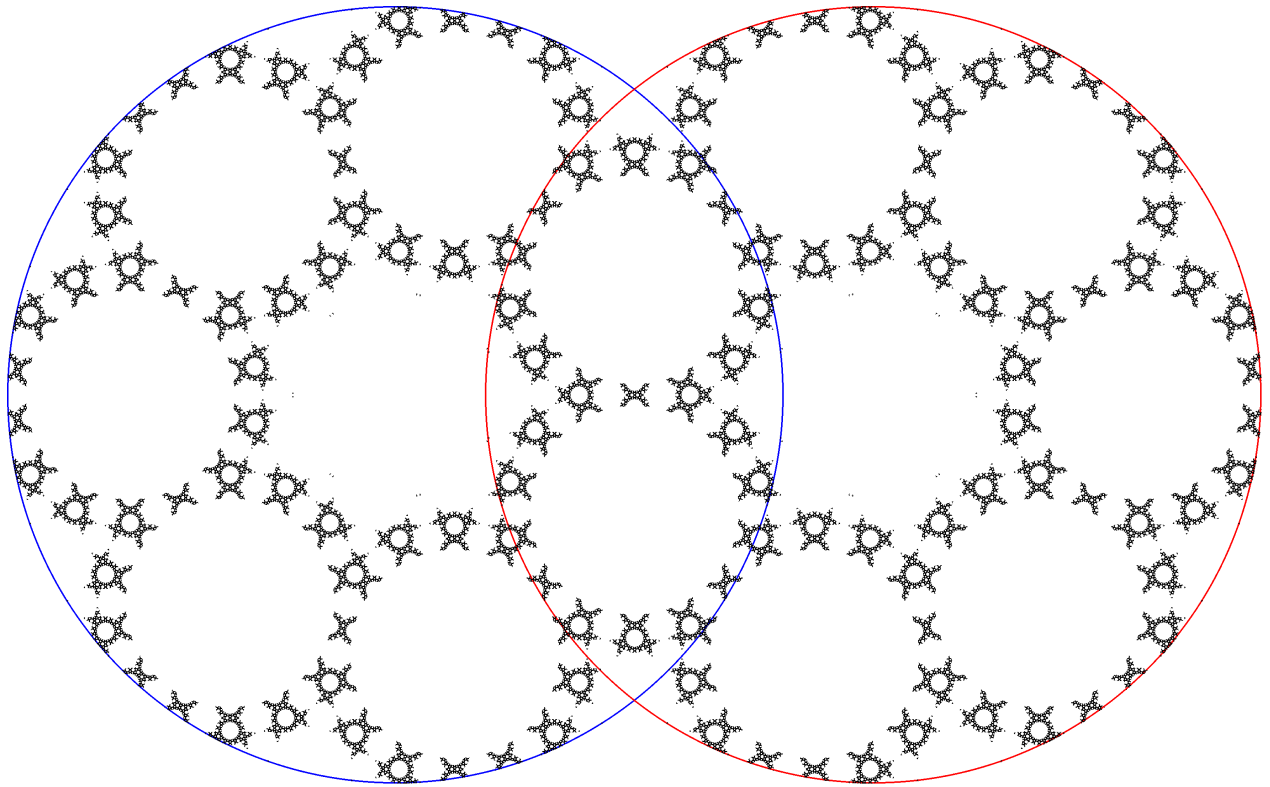


Figure 2: $GG_7(1.623574)$.

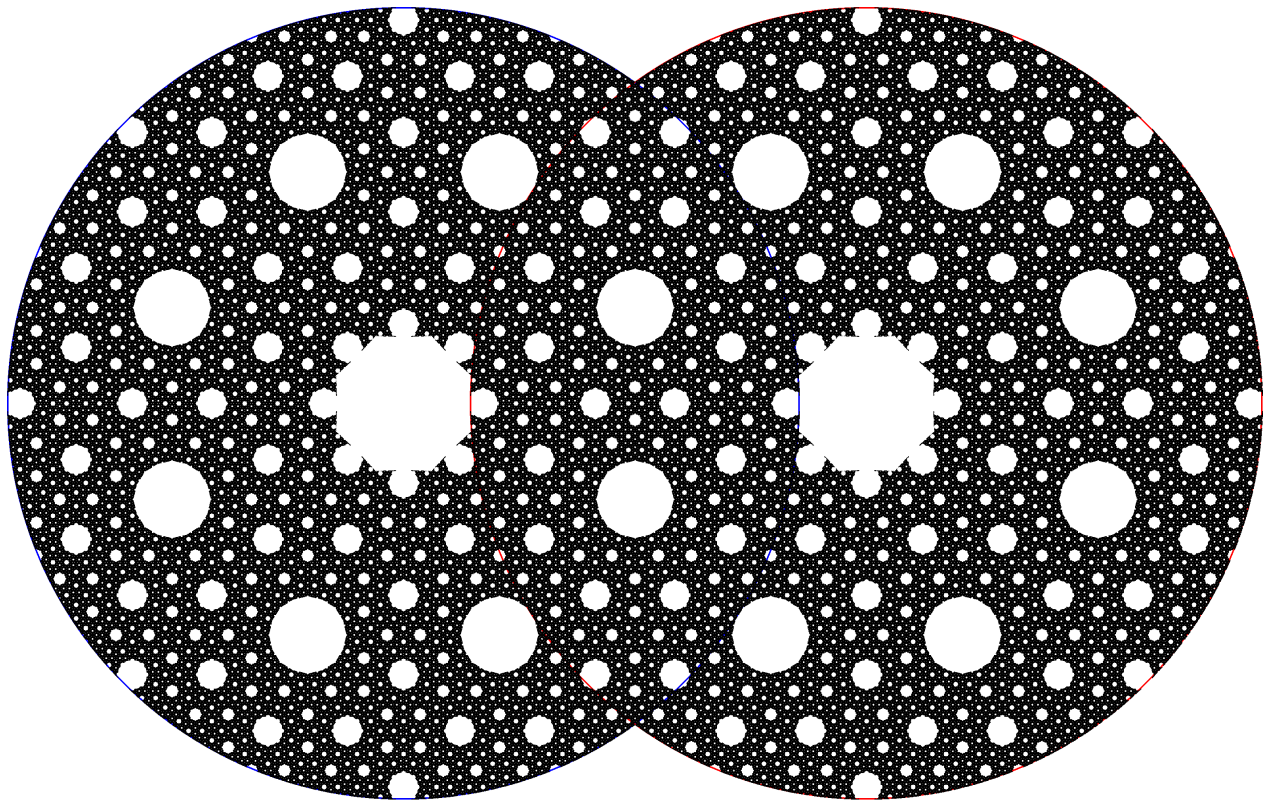


Figure 3: $GG_8(1.711405)$.

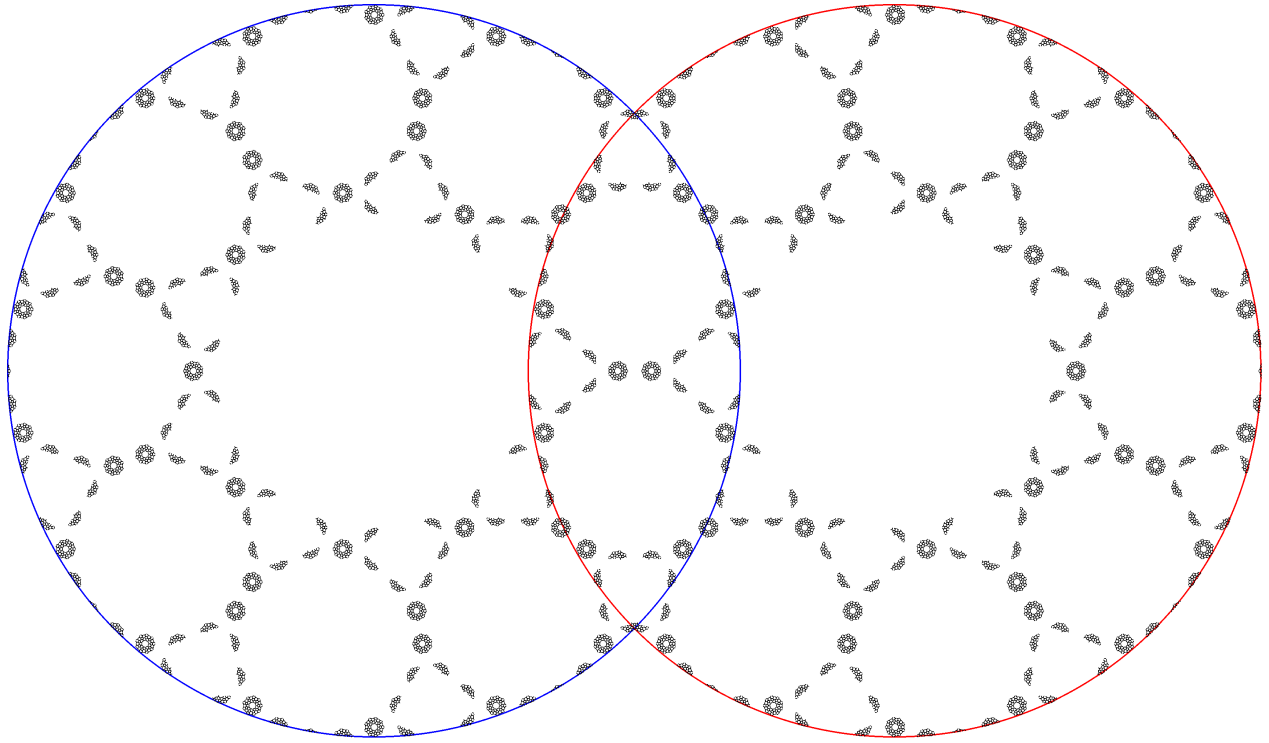


Figure 4: $GG_9(1.408482)$.

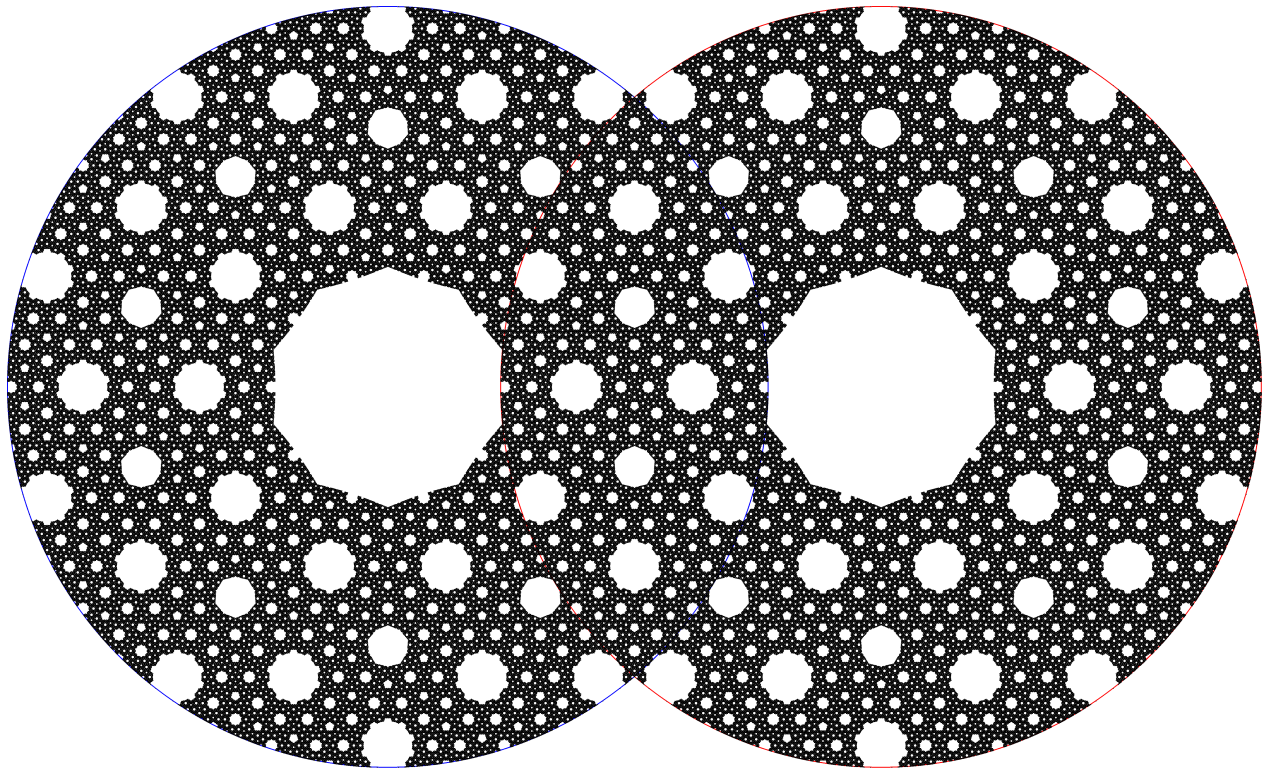


Figure 5: $GG_{10}(1.543357)$.

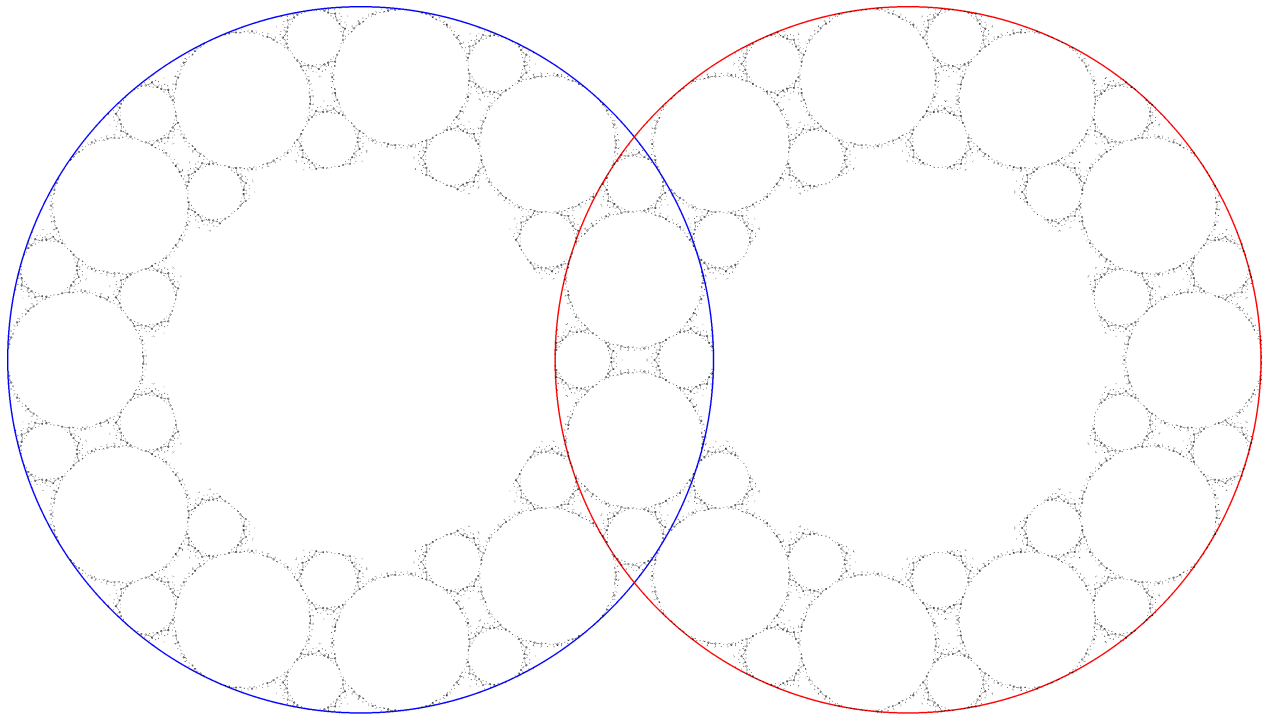


Figure 6: $GG_{11}(1.290582)$.

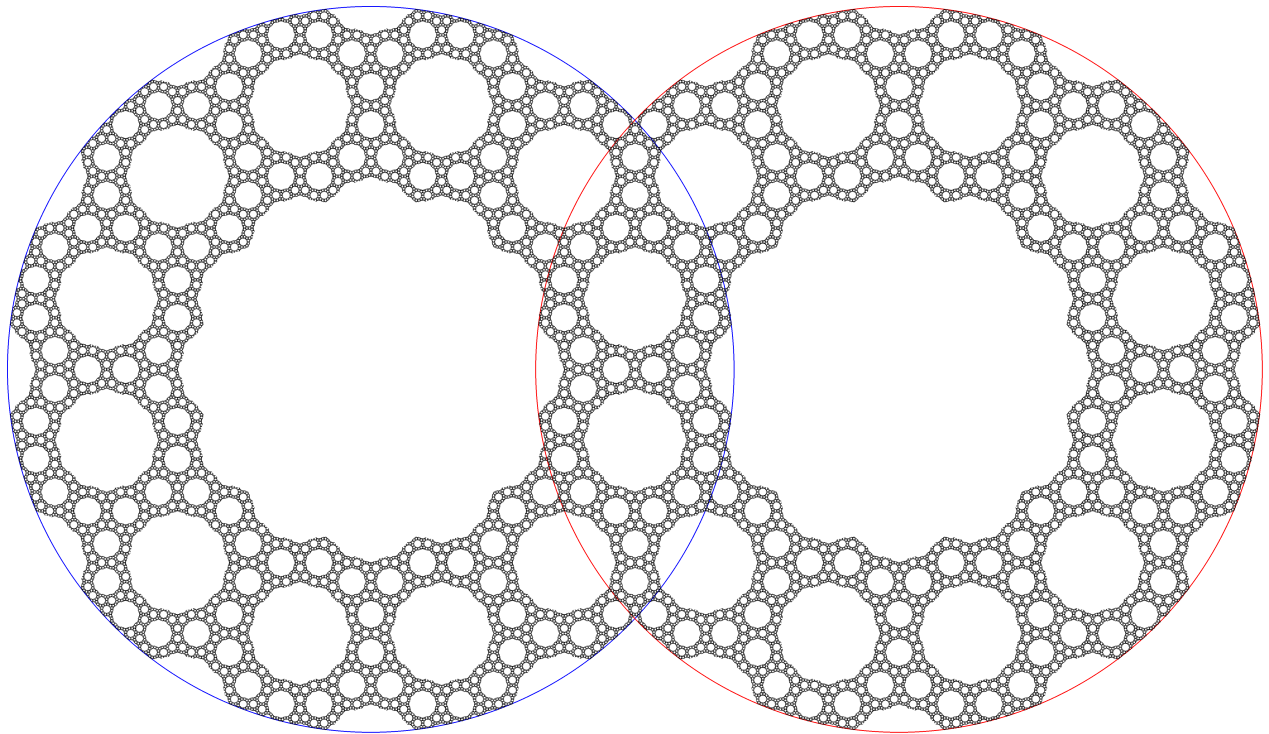


Figure 7: $GG_{12}(1.376547)$.

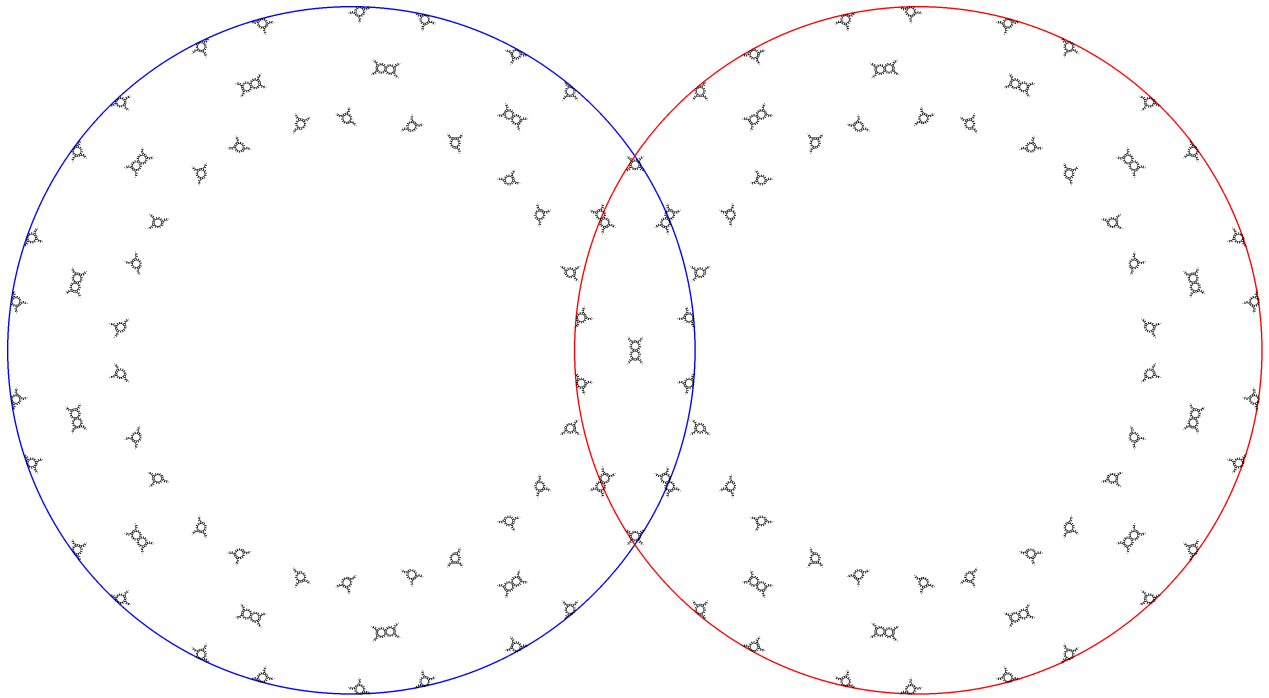


Figure 8: $GG_{13}(1.213594)$.

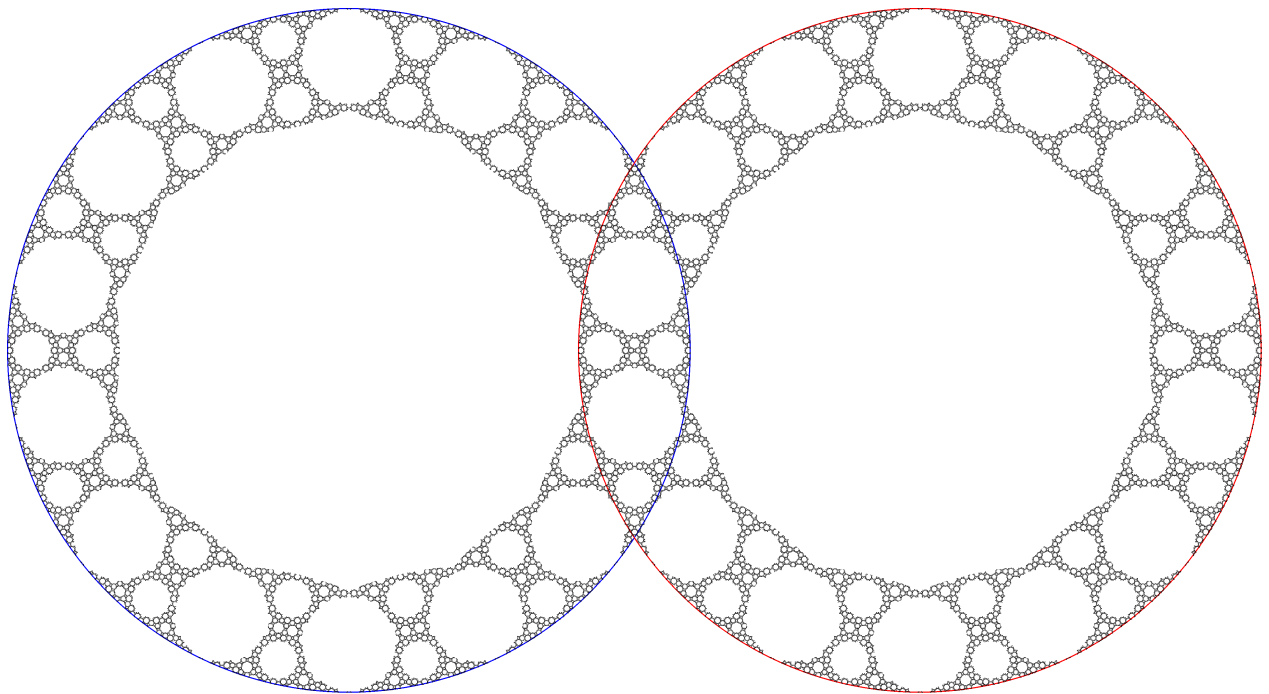


Figure 9: $GG_{14}(1.213594)$.

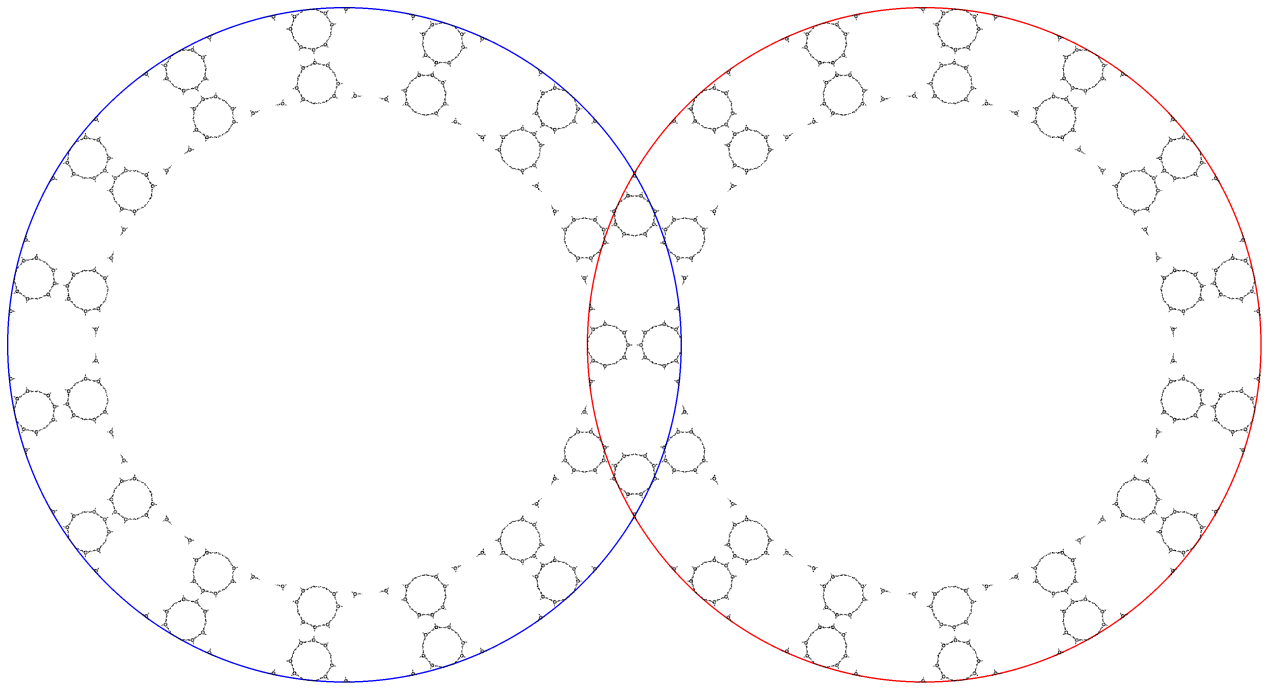


Figure 10: $GG_{15}(1.163275)$.

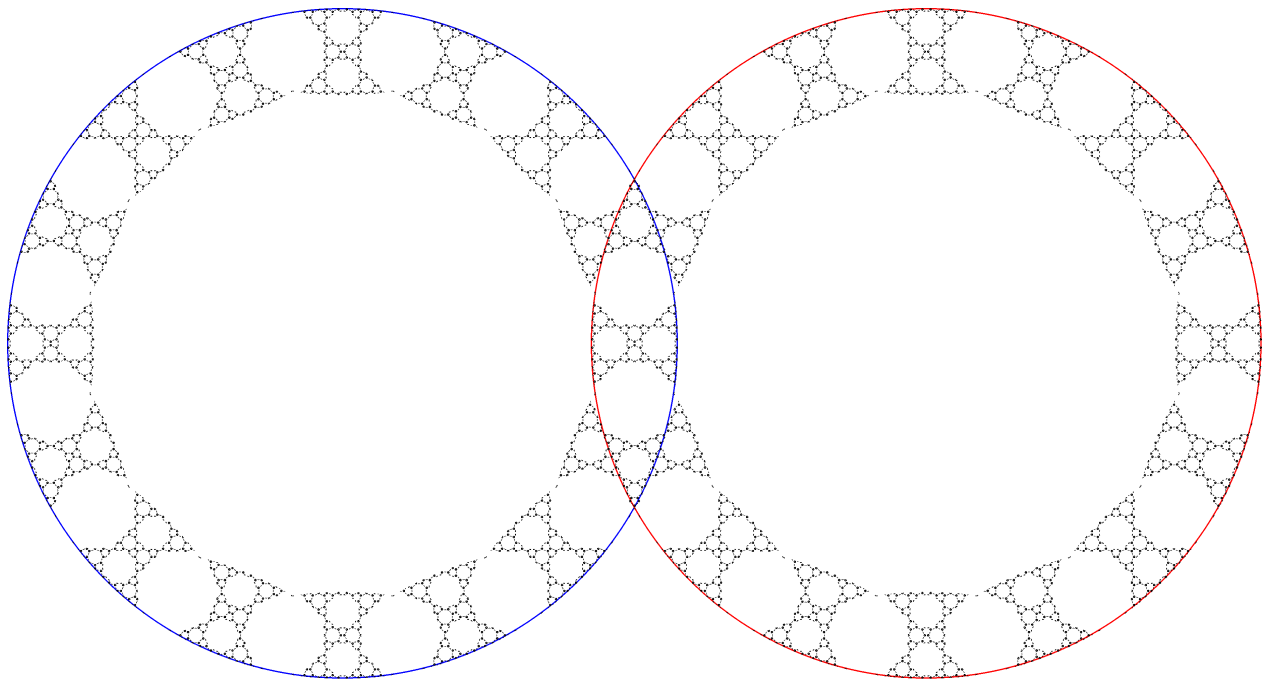


Figure 11: $GG_{16}(1.1484703)$.

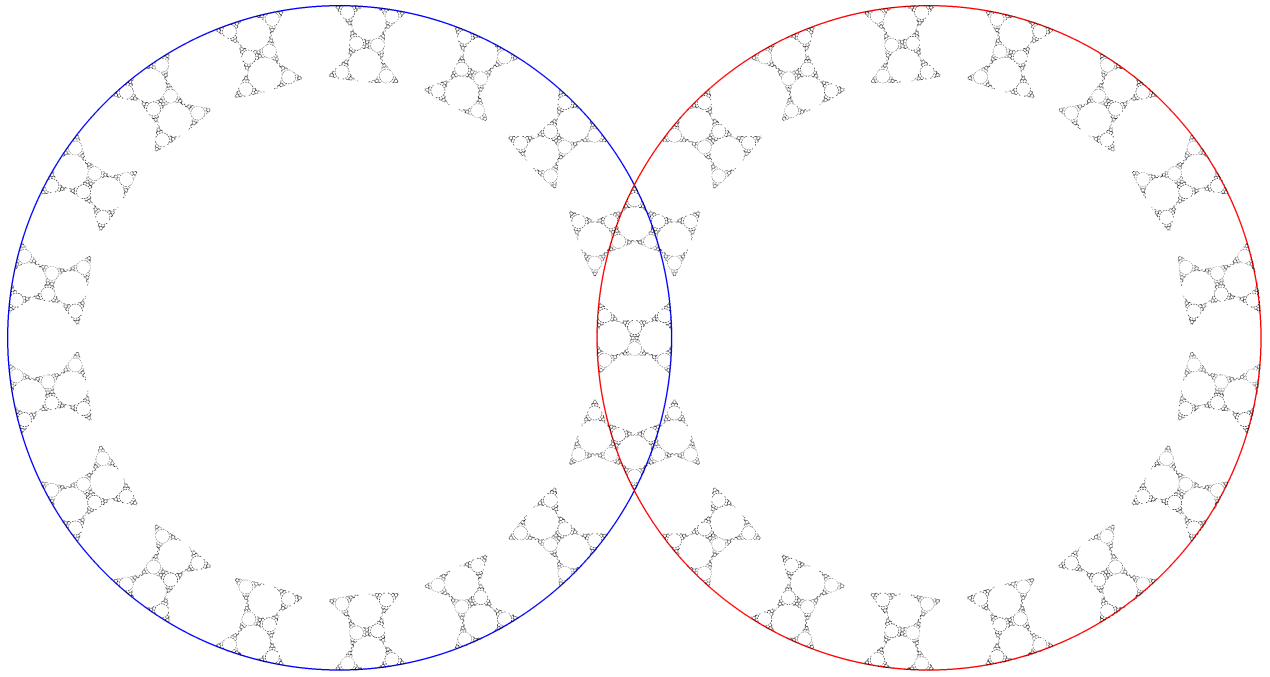


Figure 12: $GG_{17}(1.127509)$.

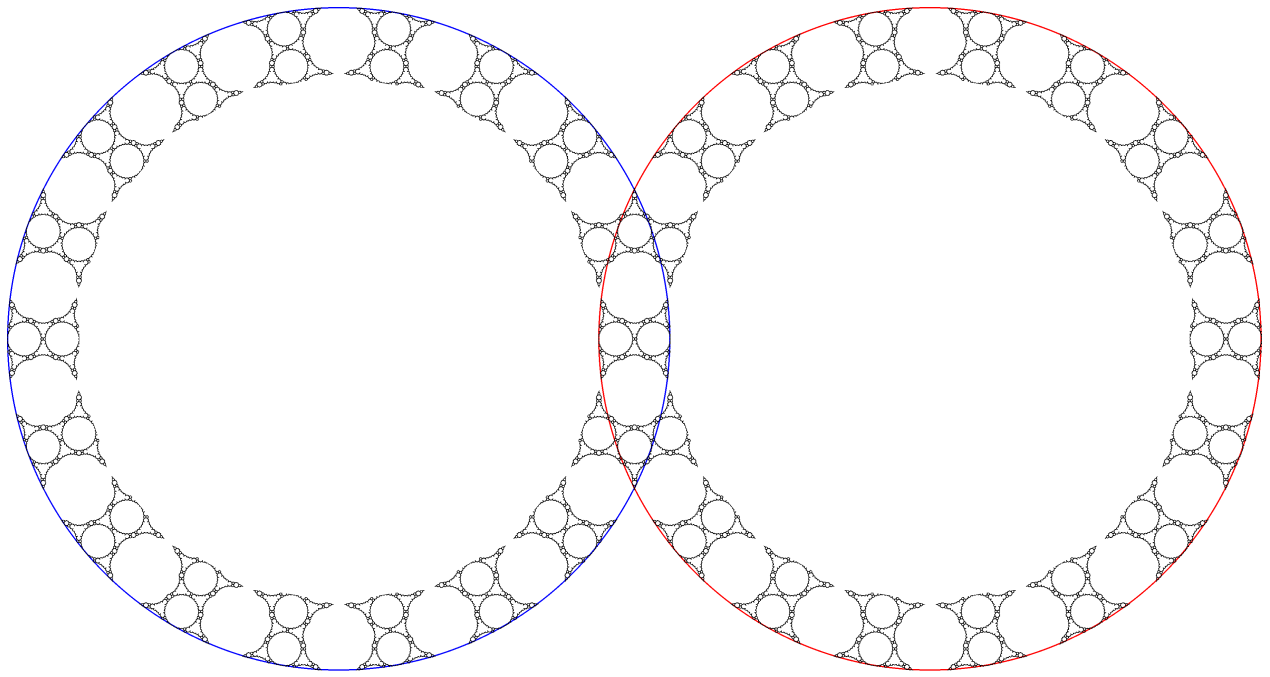


Figure 13: $GG_{18}(1.121504)$.

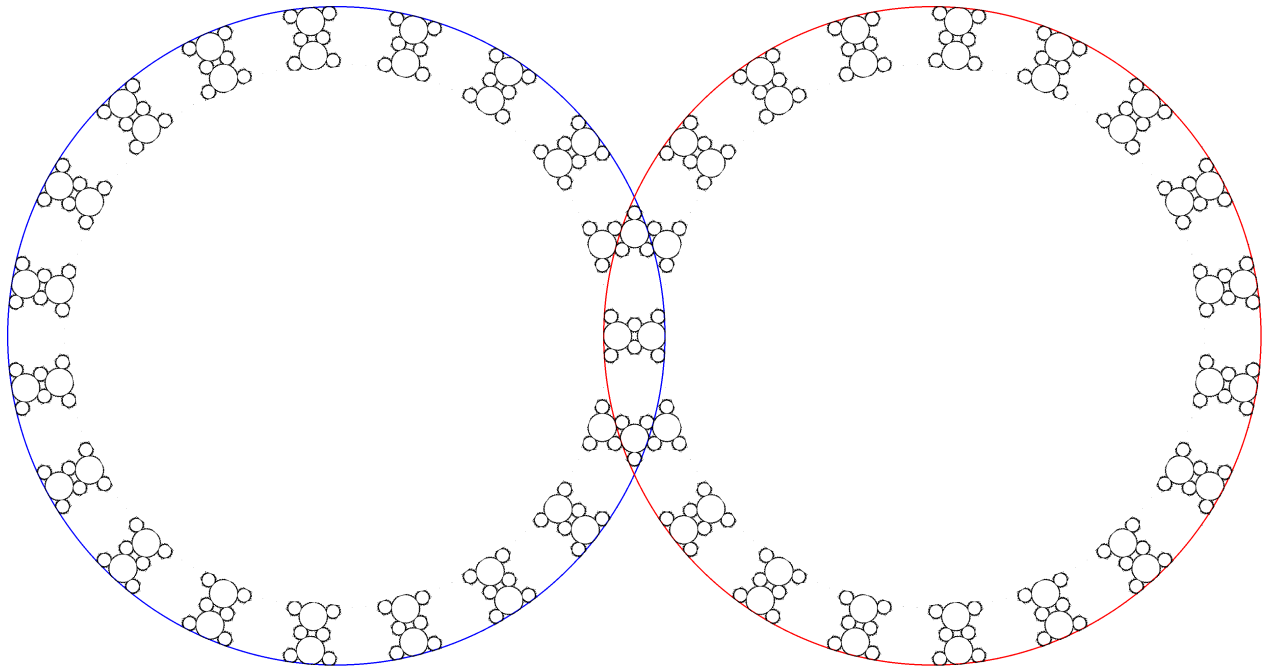


Figure 14: $GG_{19}(1.104246)$.

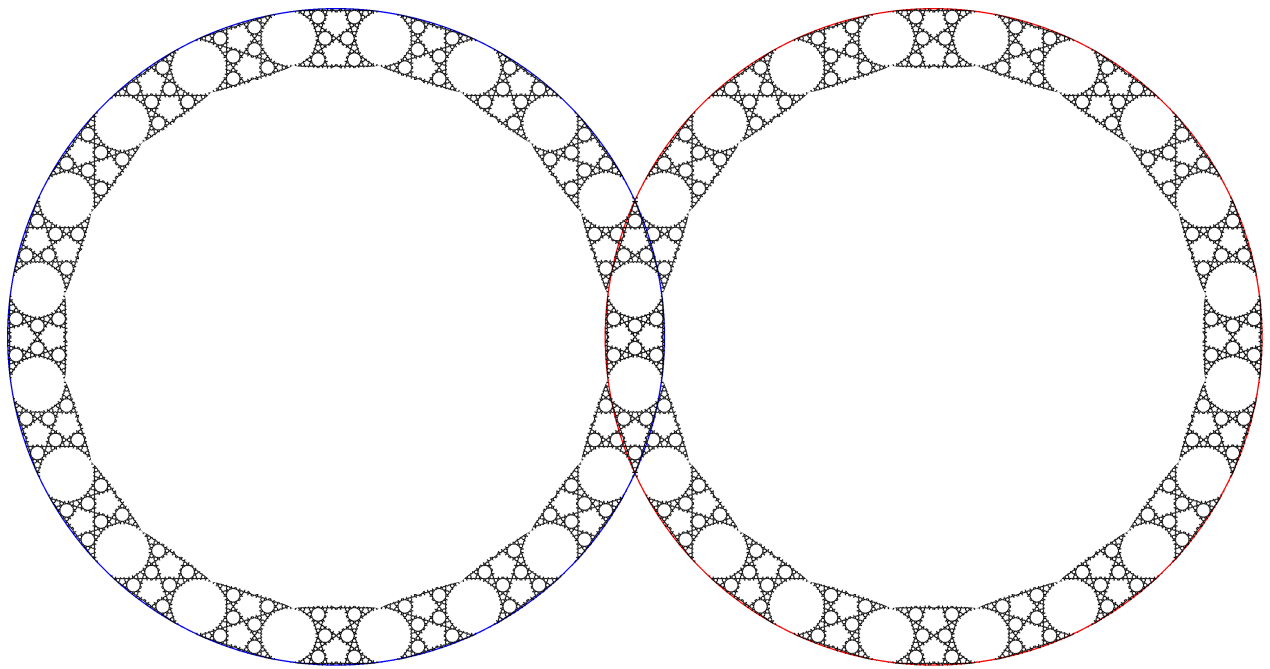


Figure 15: $GG_{20}(1.100581)$.

Full Portraits

In addition to these portraits, some movies of systems with varying zooms and radii may be found at <https://tinyurl.com/yz9pntwy>.

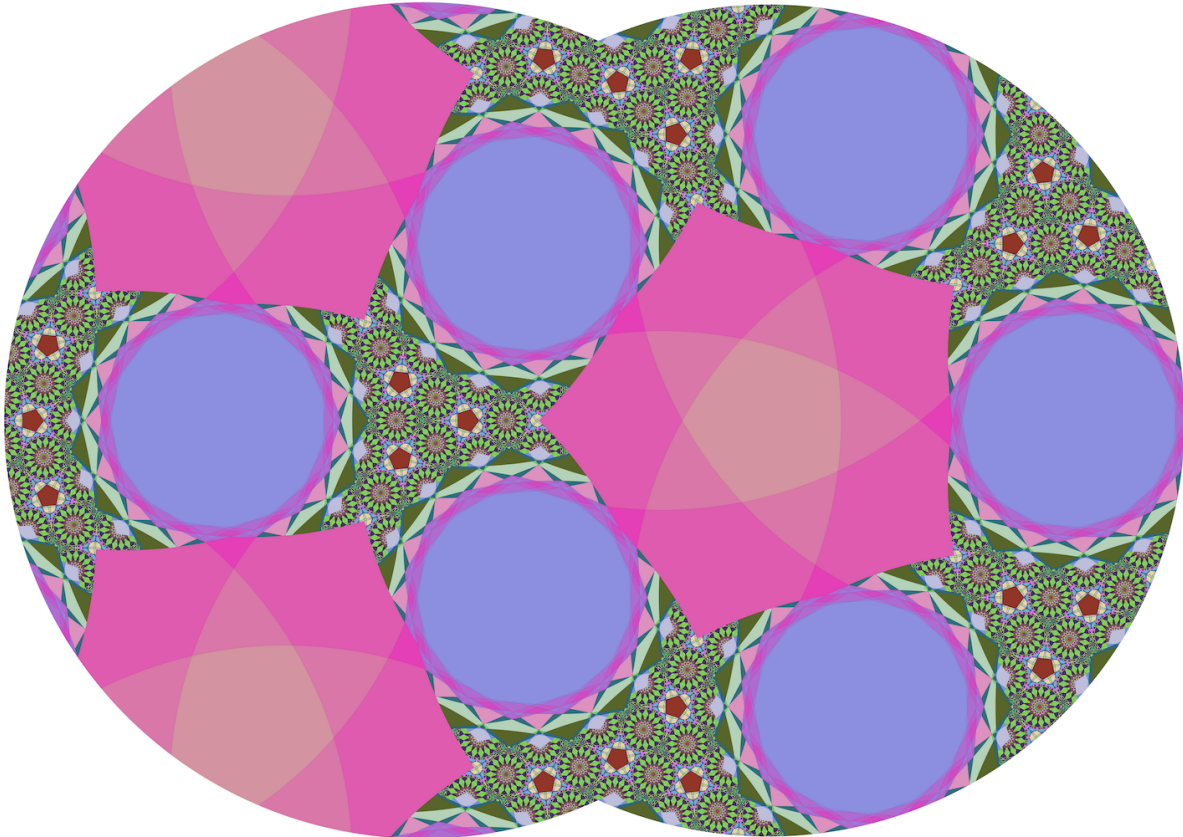


Figure 16: $GG_{3,5}(2.42, 2.41)$.

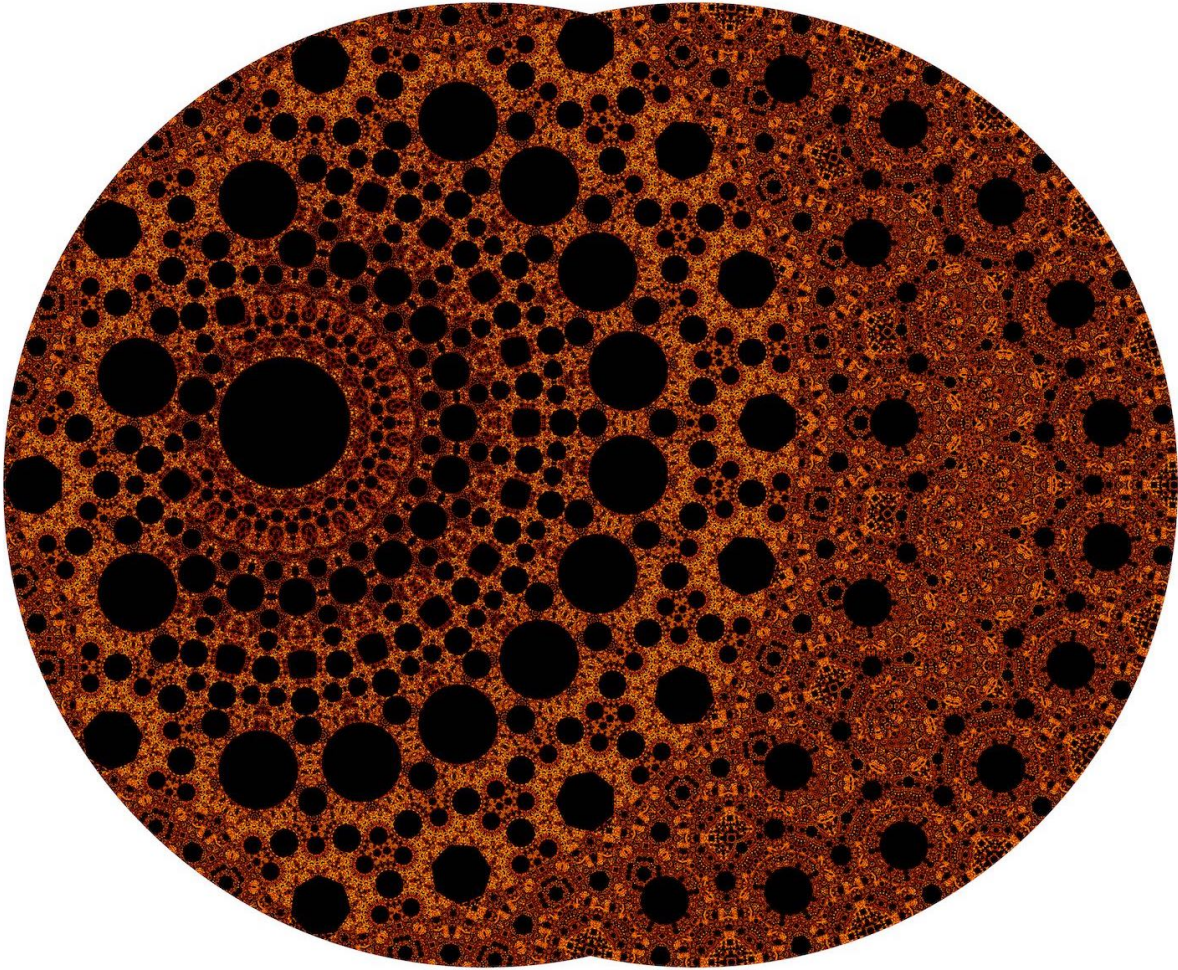


Figure 17: $GG_{21}(5.82)\langle a^2b^{-1}\rangle$.

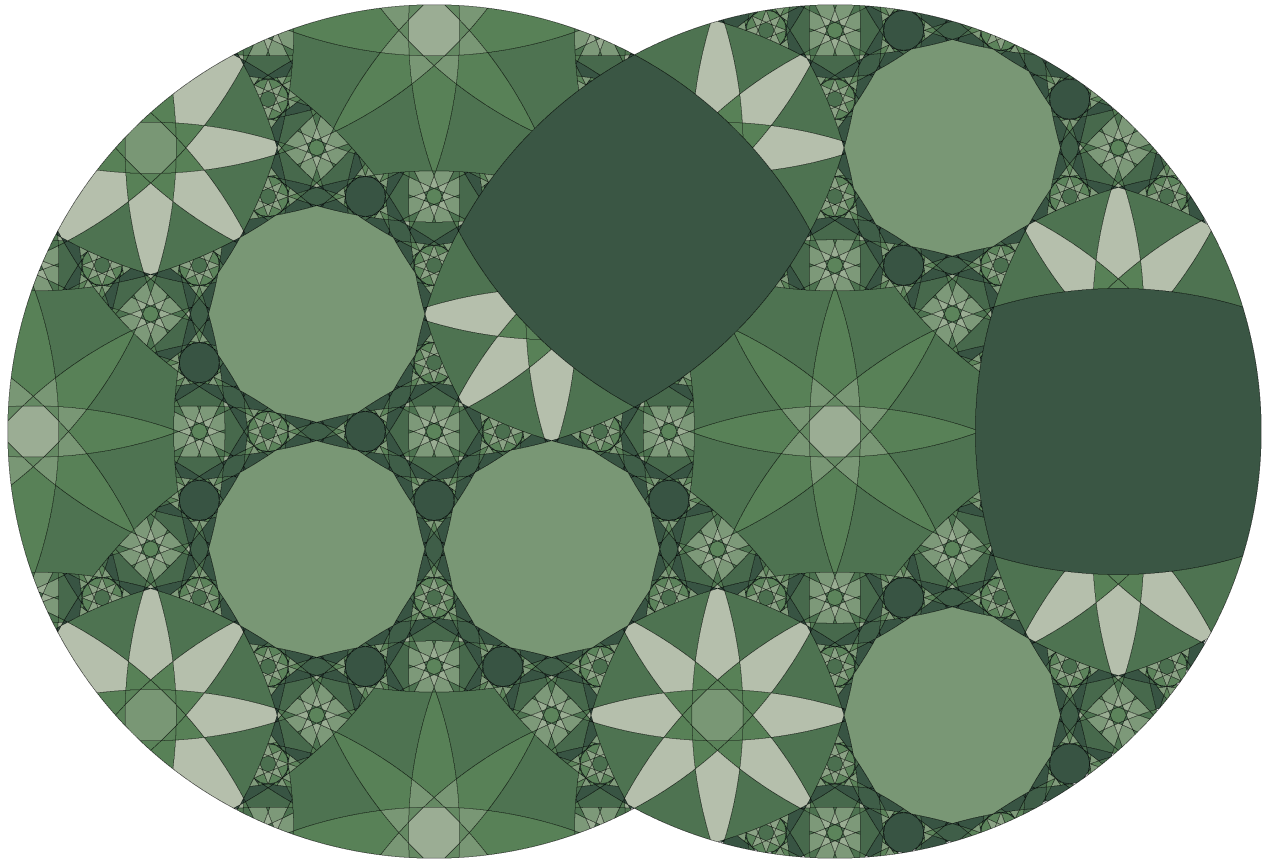


Figure 18: $GG_8(2.12)\langle a^2b^5 \rangle$.

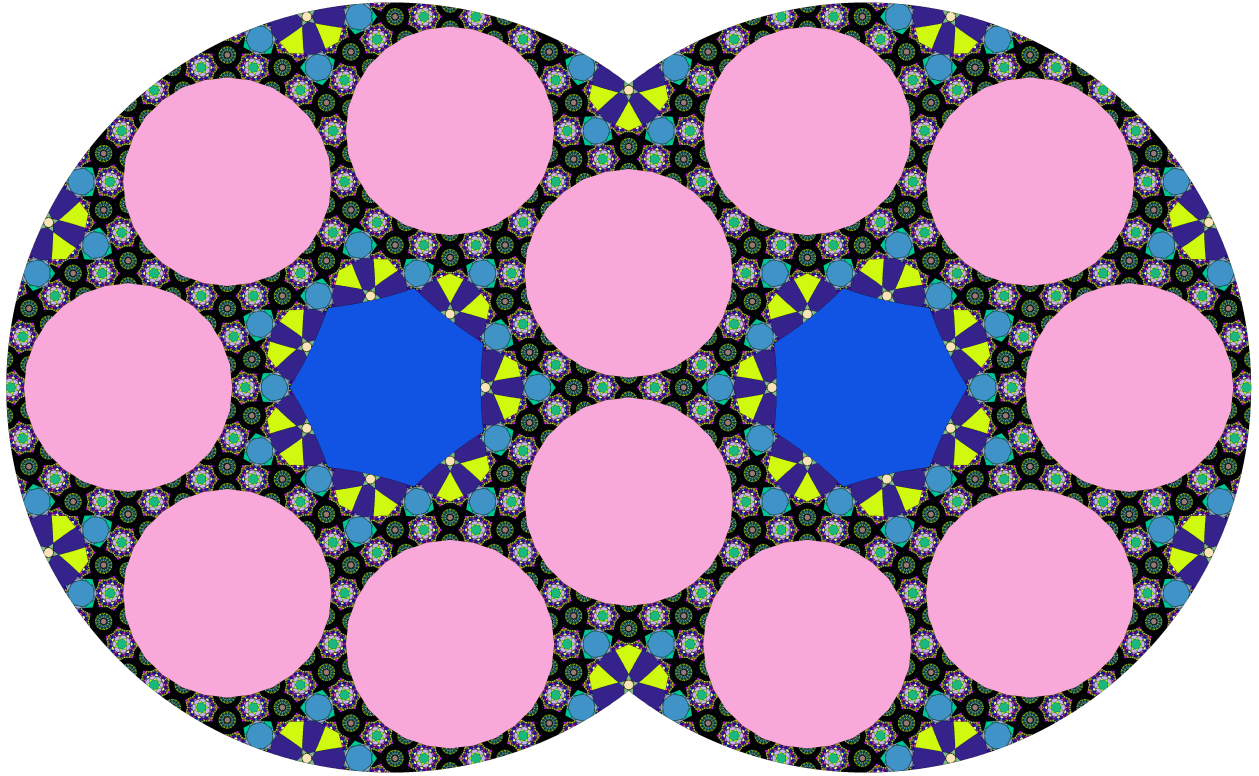


Figure 19: $GG_7(1.6233)$.

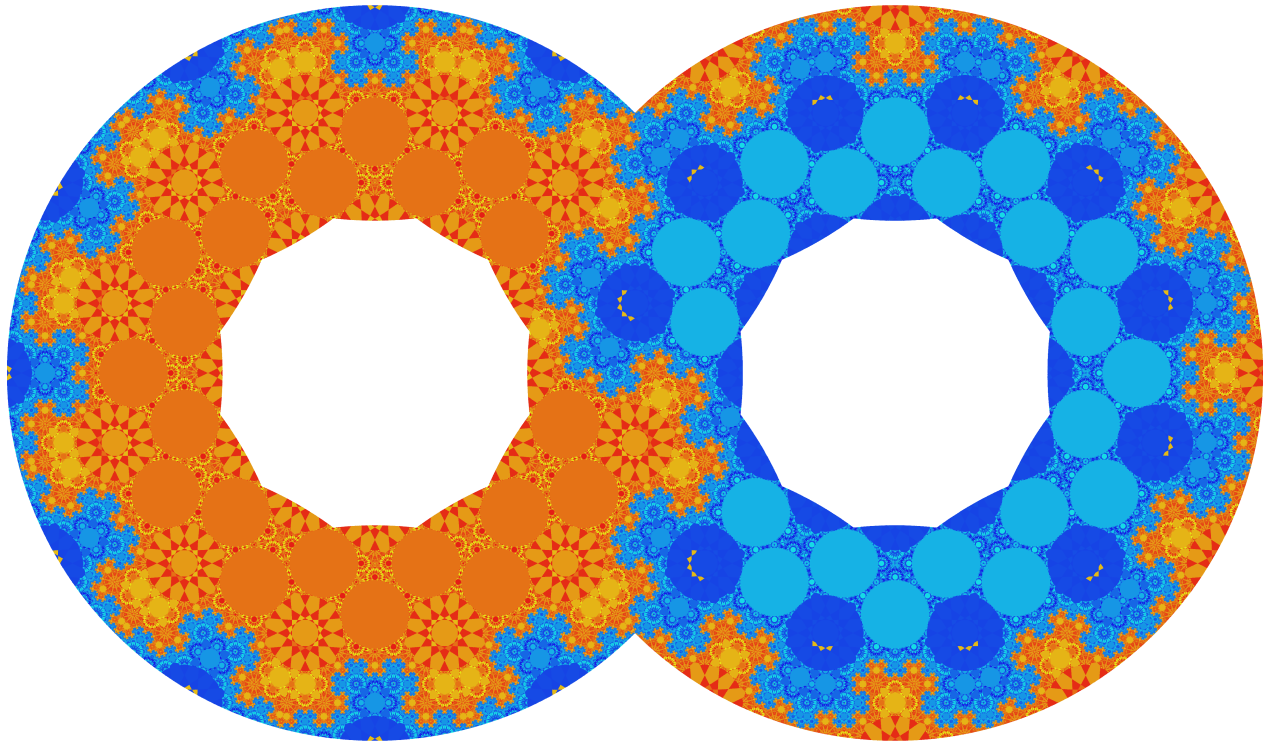


Figure 20: $GG_{12}(\sqrt{2})\langle ab^{-1} \rangle$.

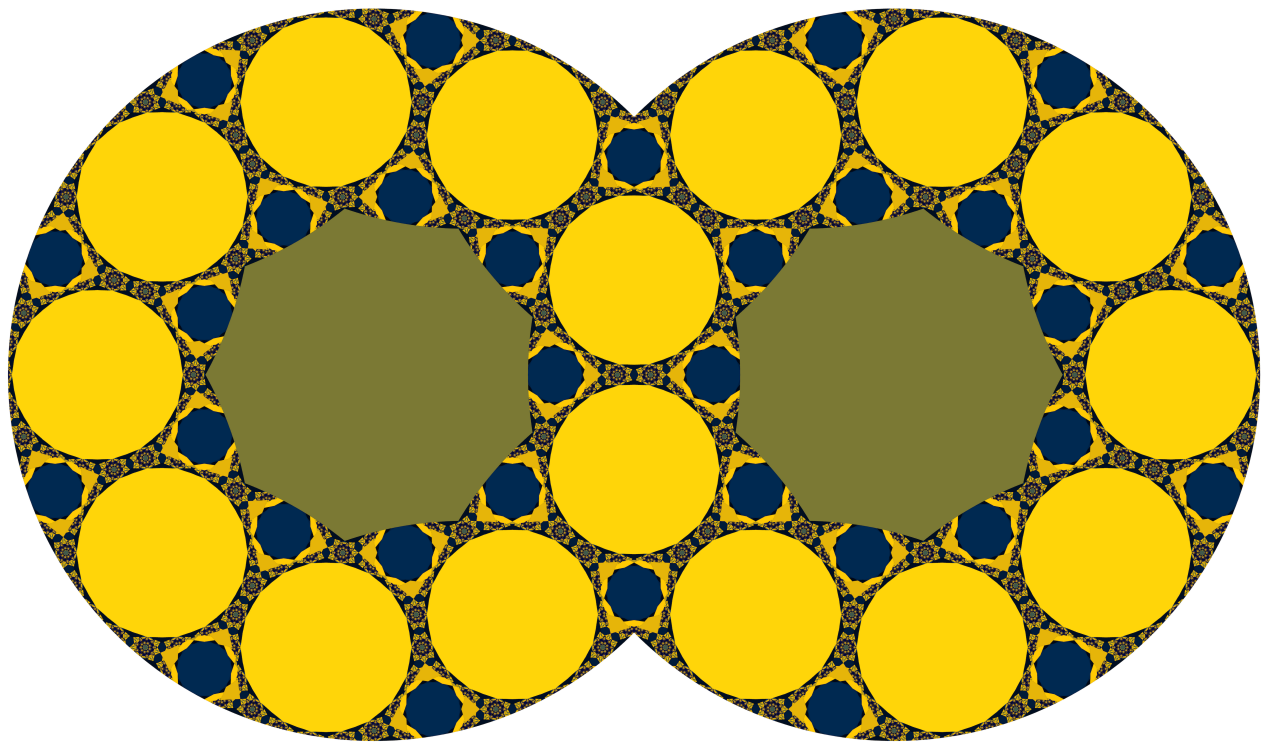


Figure 21: $GG_9(1.408)$.

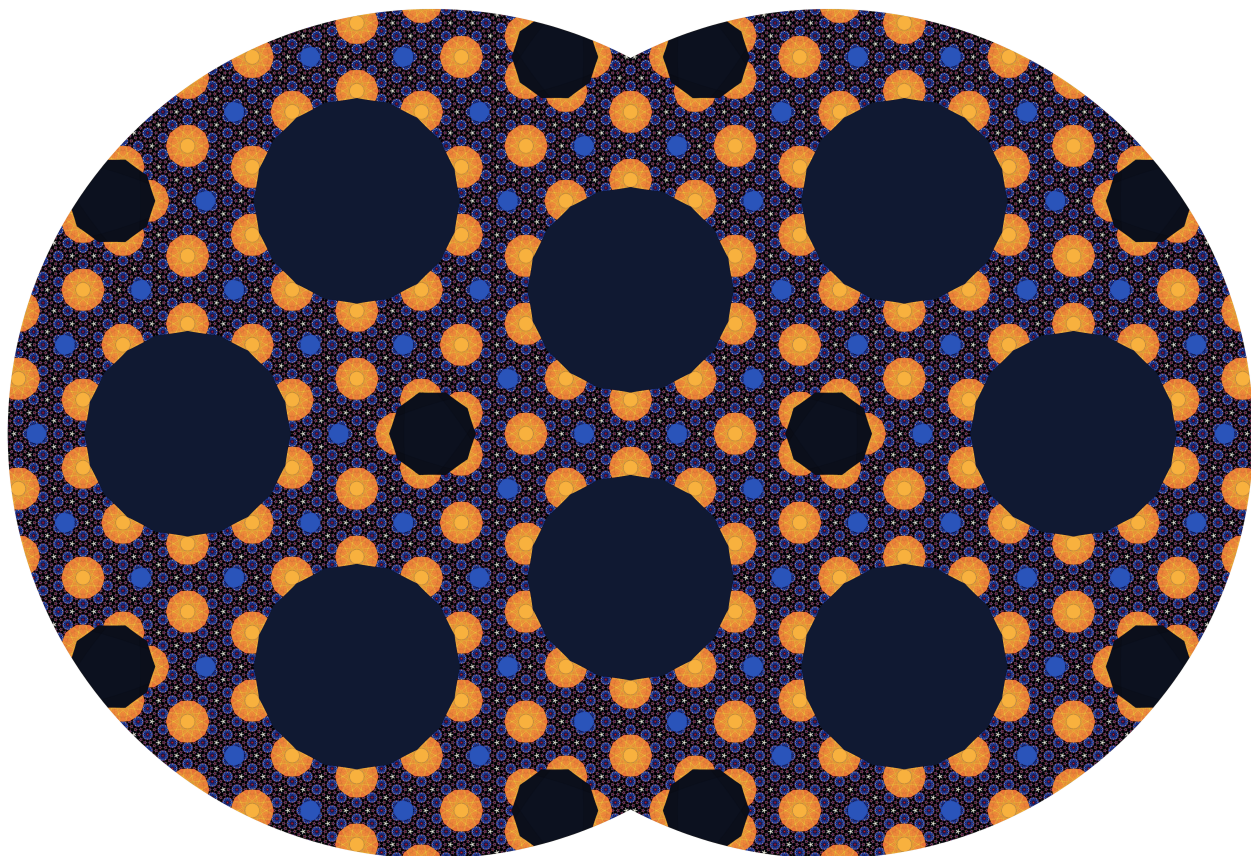


Figure 22: $GG_5(2.144)$.

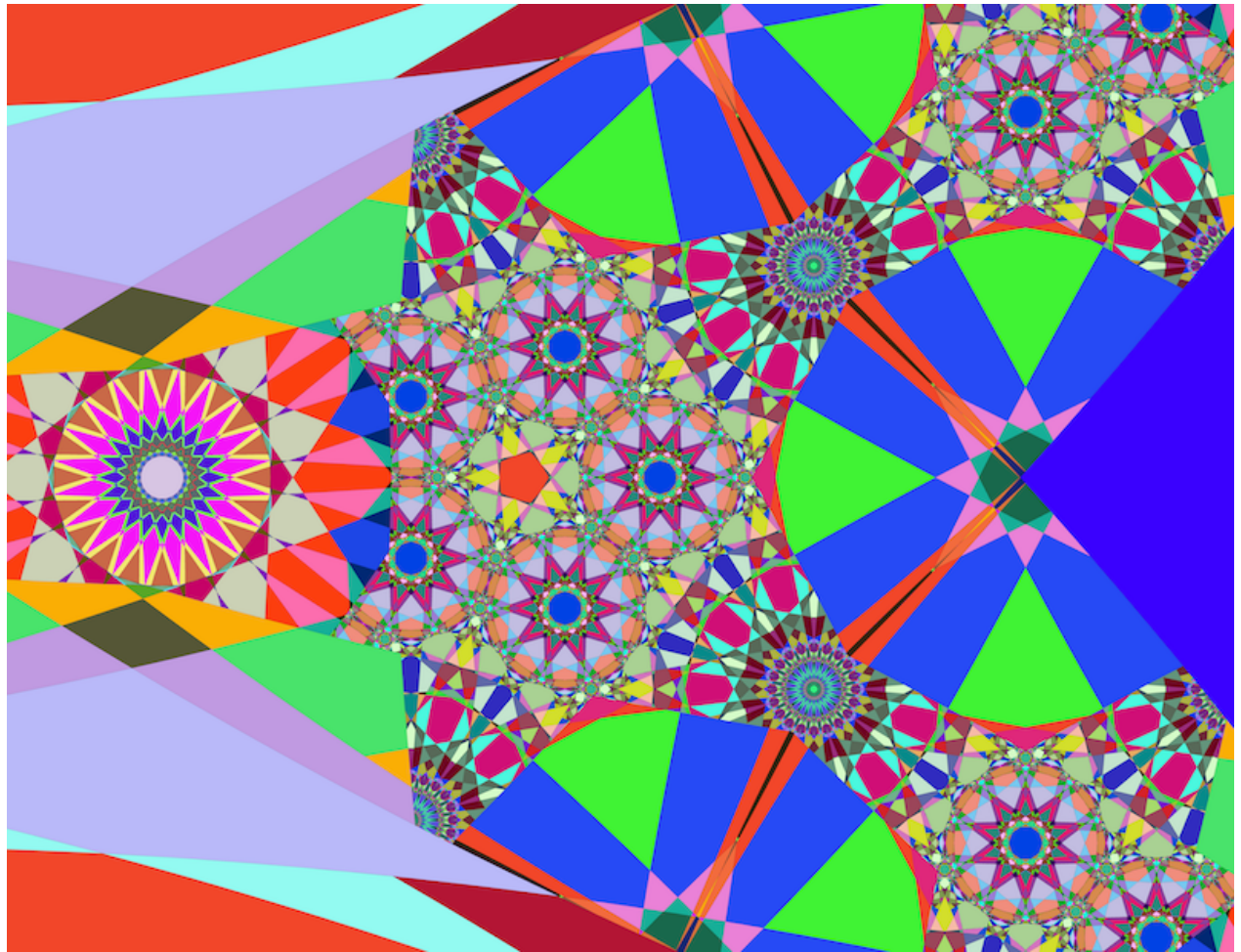


Figure 23: $GG_{5,4}(2.13, 2.06)$ (zoom).

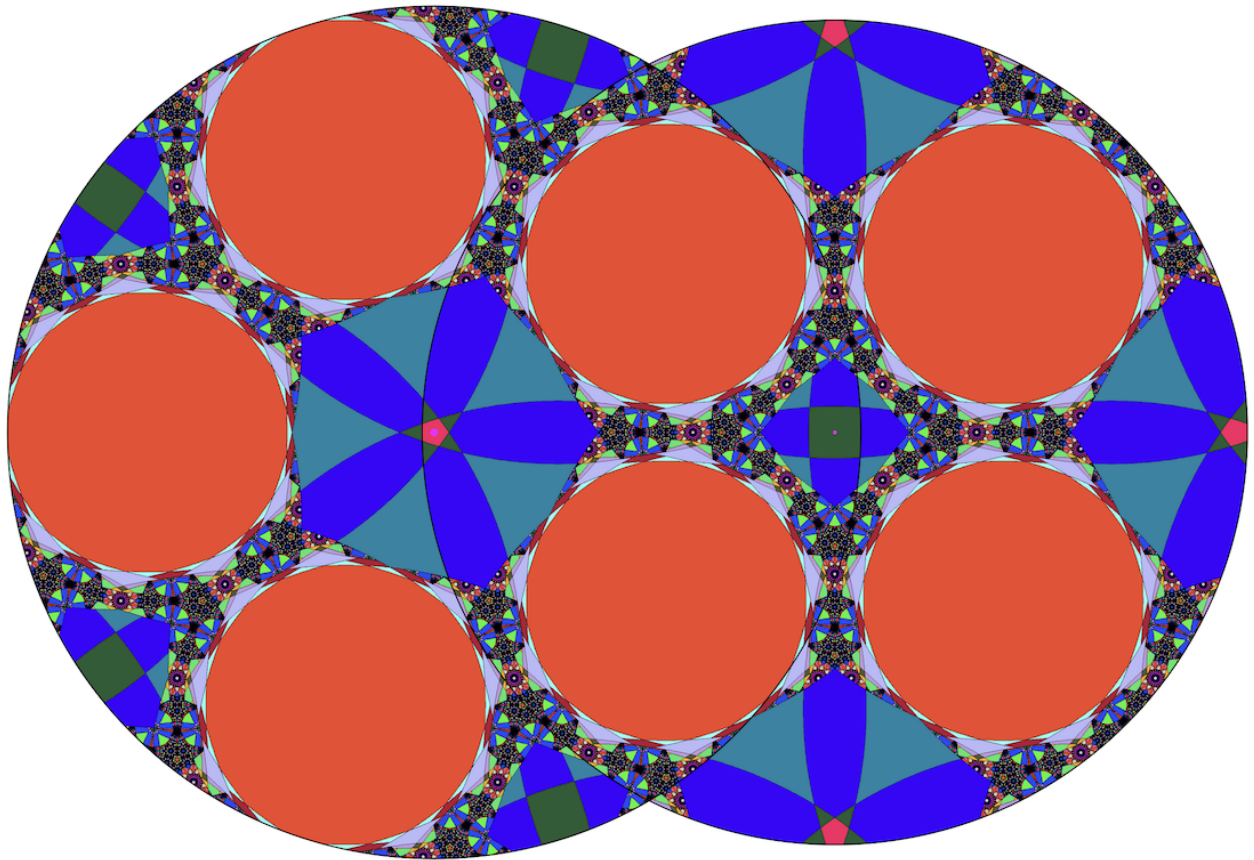


Figure 24: $GG_{5,4}(2.13, 2.06)$.