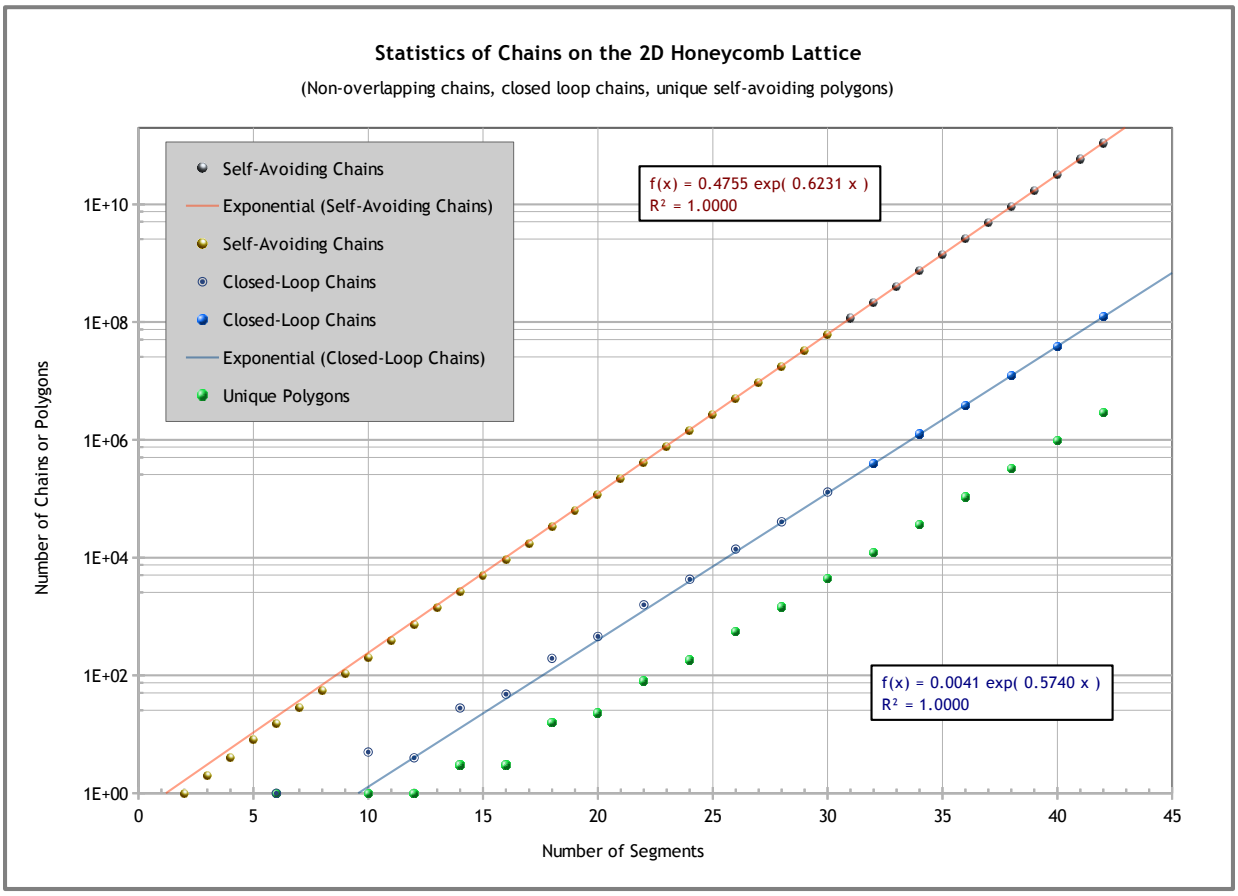
Statistics of Self-Avoiding Chains and Polygons in the 2D Honeycomb Lattice — (May 4, 2014)

# of Segments	Self-Avoiding Chains	Closed-Loop Chains	Unique Polygons	Number of Polygons By Symmetry Class							
				1	1m	2	2m	3	3m	6	6m
2	1	0	0	0	0	0	0	0	0	0	0
3	2										
4	4	0	0	0	0	0	0	0	0	0	0
5	8										
6	15	1	1	0	0	0	0	0	0	0	1
7	29										
8	56	0	0	0	0	0	0	0	0	0	0
9	108										
10	203	5	1	0	0	0	1	0	0	0	0
11	388										
12	736	4	1	0	0	0	0	0	1	0	0
13	1398										
14	2630	28	3	0	1	0	2	0	0	0	0
15	4982										
16	9378	48	3	2	1	0	0	0	0	0	0
17	17700										
18	33225	195	16	4	3	4	2	0	2	0	1
19	62584										
20	117384	460	23	18	5	0	0	0	0	0	0
21	220666										
22	413282	1584	80	50	14	10	6	0	0	0	0
23	775744										
24	1451702	4296	183	168	9	0	0	4	2	0	0
25	2721370										
26	5087729	14001	563	462	52	40	9	0	0	0	0
27	9526928										
28	17799014	40684	1453	1418	35	0	0	0	0	0	0
29	33298068										
30	62166075	129995	4415	4114	144	124	15	10	6	0	2
31	116202999										
32	216825708	392800	12275	12178	97	0	0	0	0	0	0
33	405008856										
34	755302825	1247885	36917	36006	482	400	29	0	0	0	0
35	1409930613										
36	2628181908	3861276	107289	106952	290	0	0	40	7	0	0
37	4903287880										
38	9136005987	12273221	323627	320882	1450	1242	53	0	0	0	0
39	17036013381										
40	31730100342	38558000	963950	963068	882	0	0	0	0	0	0
41	59140552046										
42	110111883195	122953089	2929563	2920880	4515	3940	86	116	21	2	3


Statistics of Chains on the 2D Honeycomb Lattice
(Non-overlapping chains, closed loop chains, unique self-avoiding polygons)
Self-Avoiding Chains
Exponential (Self-Avoiding Chains)
Self-Avoiding Chains
Closed-Loop Chains
Closed-Loop Chains
Exponential (Closed-Loop Chains)
Unique Polygons
f(x) = 0.4755 exp(0.6231 x)
R² = 1.0000
f(x) = 0.0041 exp(0.5740 x)
R² = 1.0000
Number of Chains or Polygons
1E+10
1E+08
1E+06
1E+04
1E+02
1E+00
0
5
10
15
20
25
30
35
40
45
Number of Segments