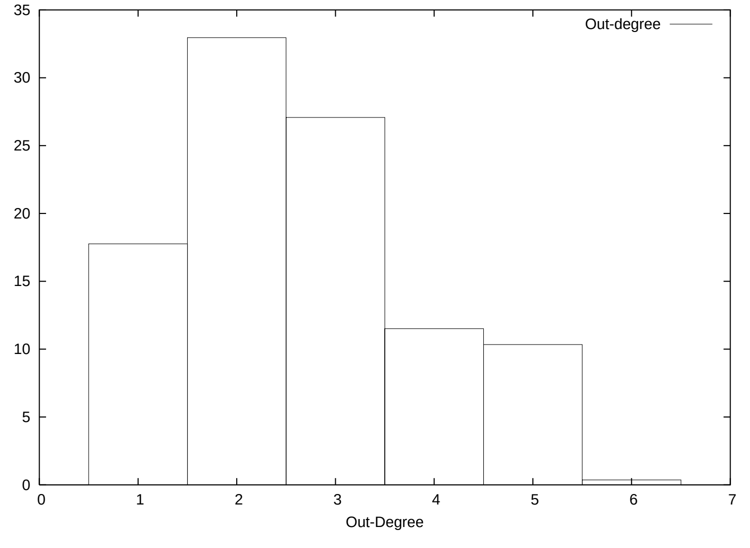
Graph: spin/petersonN.red

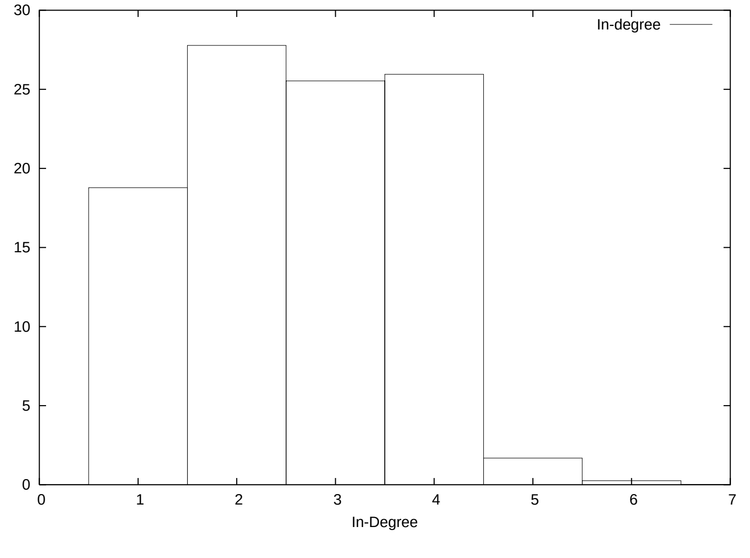
General Info

Example title	Peterson protocol for N processes
Parameter	3
Reduction	POR
Modification	
States	26,373
Edges	69,838
Average degree	2.6

Out-Degrees distribution:



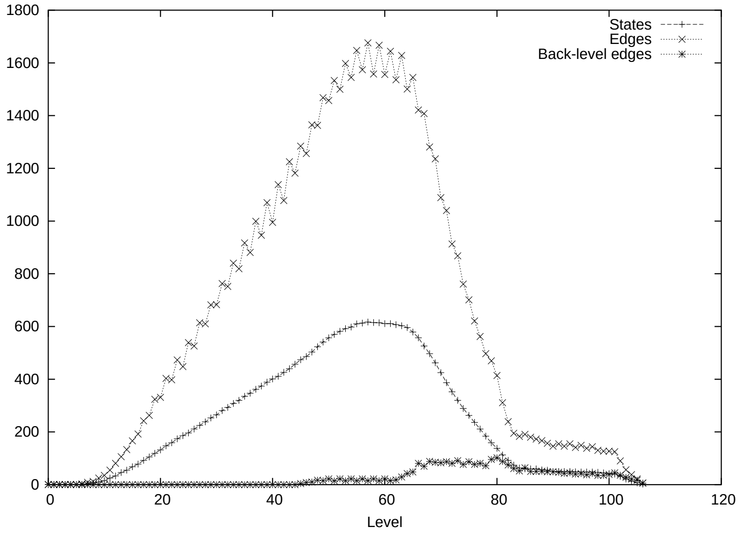
In-Degrees distribution:



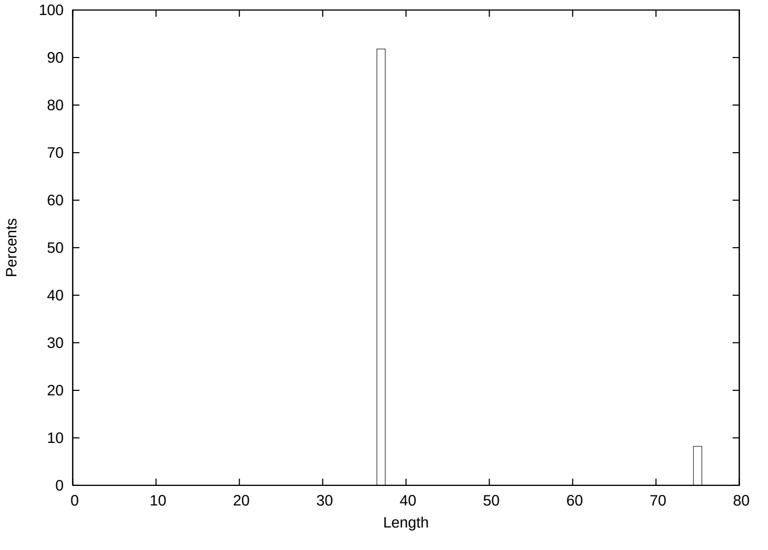
BFS Info

BFS height	106
BFS width	617 (2.3%)
Back level edges	2,817 (4%)

BFS level info:



Back level edges lengths:



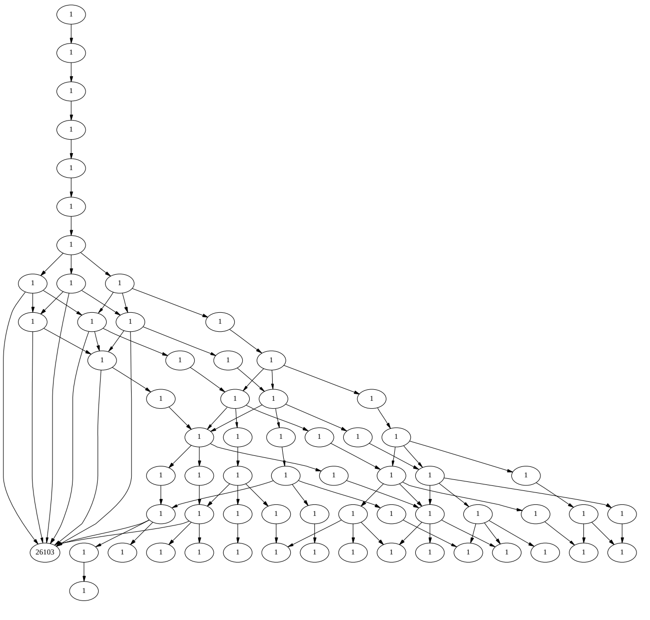
SCC Info

SCC components	271
SCC quetient height	30
SCC quetient nontrivial height	1
Number of terminal components	1
The largest component is	the only terminal

Statistics according to **sizes**:

Size	Number of components	Number of states here
26,103	1	98.9%
1	270	1%

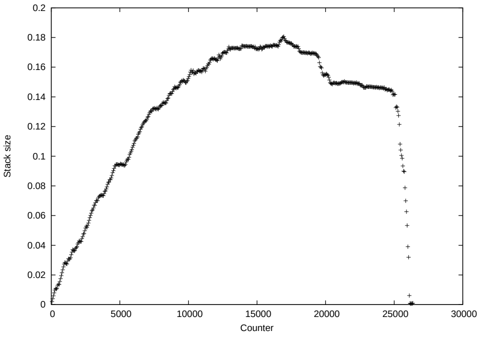
SCC component graph (part):



DFS Info

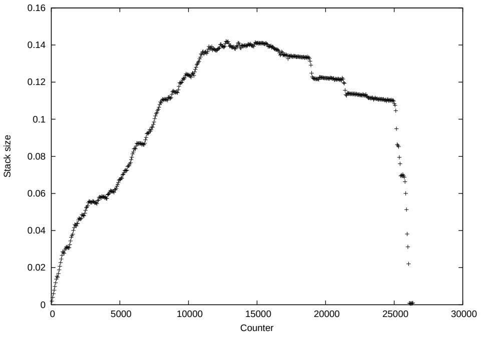
Run 0

front-edges : back-edges : cross-edges = 26,372 : 8,113 : 35,353 = 37.7%:11.6%:50.6%
Max. stack size: 4,775 (18.1%)
Shortest cycle detected: 76
Most often detected lengths of cycles: 1216 (382), 228 (301), 114 (272), 912 (257), 304 (239)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 26,372 : 6,461 : 37,005 = 37.7%:9.2%:52.9%
Max. stack size: 3,749 (14.2%)
Shortest cycle detected: 76
Most often detected lengths of cycles: 228 (380), 114 (357), 1558 (307), 1026 (243), 494 (242)
Stack graph:



Local Structure

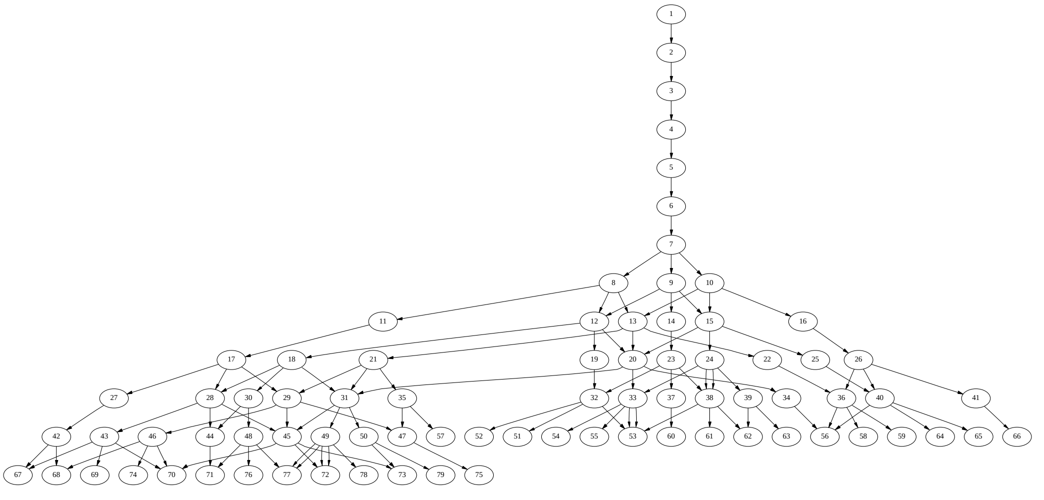
Short cycles(up to 6)
none
Diamonds

20,102 (76.2%)

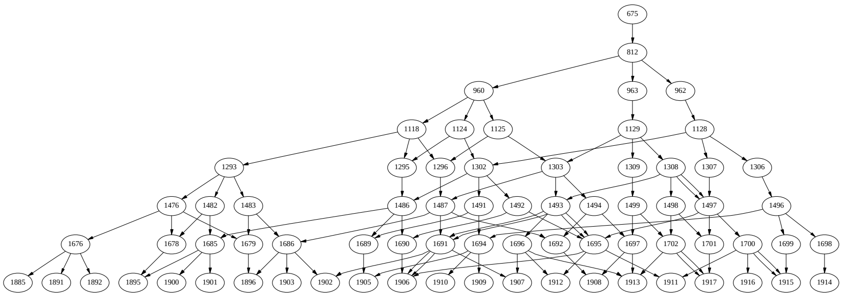
Neighborhoods

k	avg size	avg clustering
1	3.2	1.1
2	7.1	1.3
3	13	1.5
4	21.4	1.6

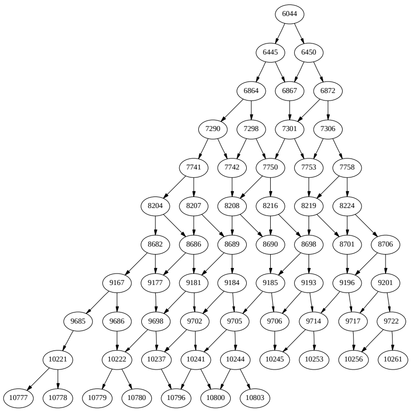
Visualization of some parts of the state state space:
Initial walk length: 0



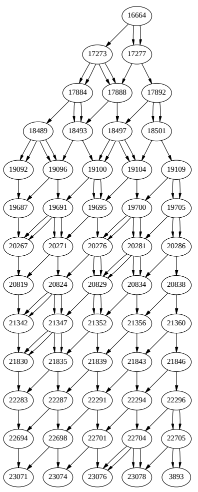
Initial walk length: 20



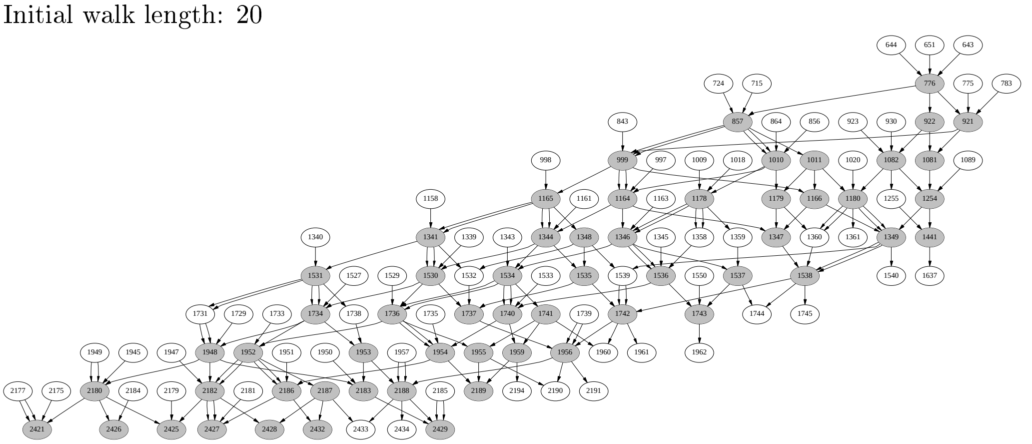
Initial walk length: 40



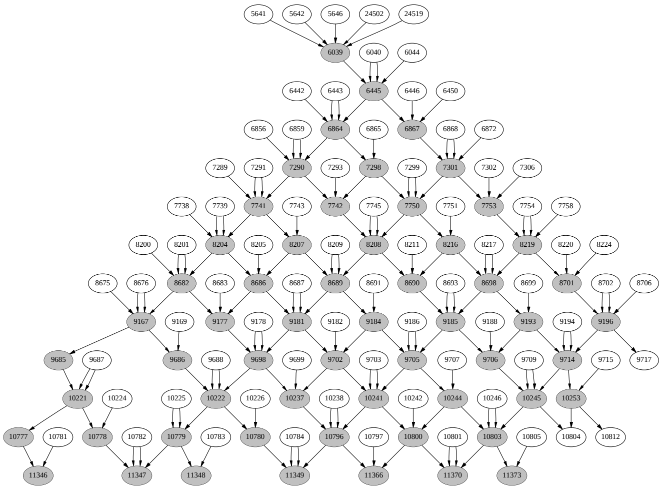
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60