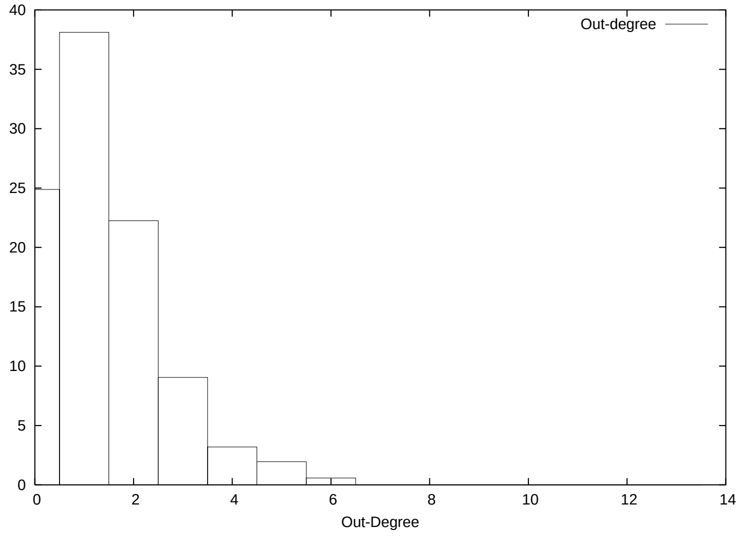
Graph: spin/brp.red

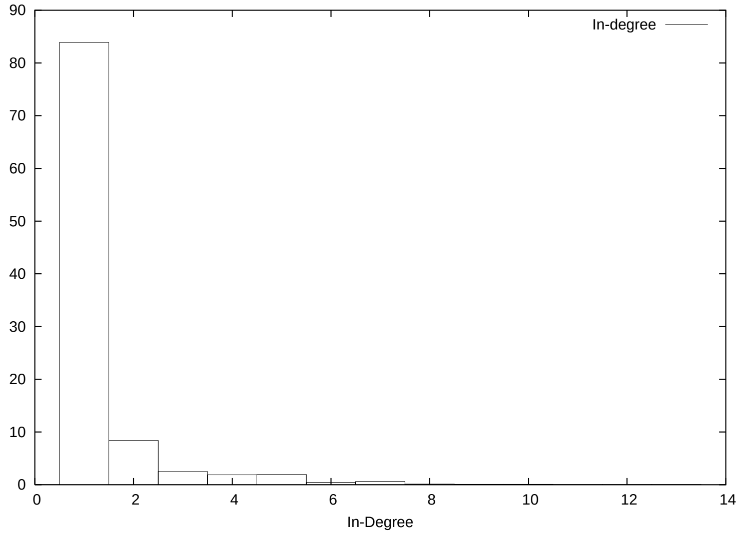
General Info

Example title	Bounded Retransmition Protocol
Parameter	
Reduction	POR
Modification	
States	391,312
Edges	531,131
Average degree	1.3

Out-Degrees distribution:



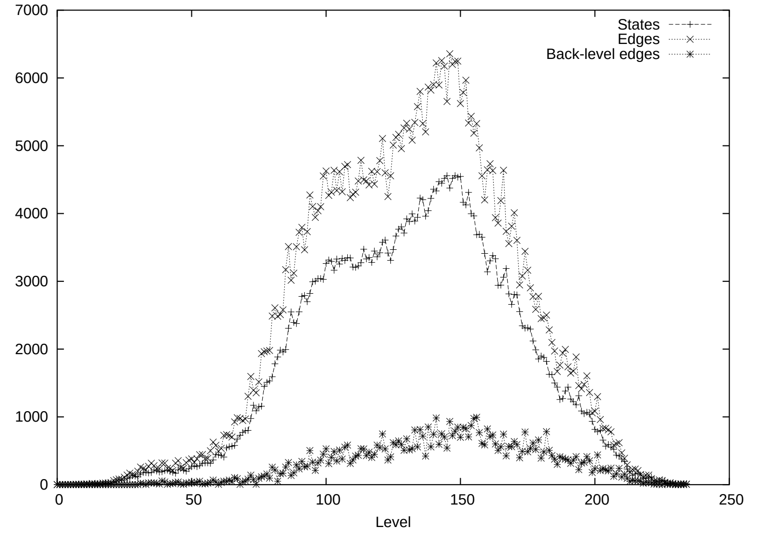
In-Degrees distribution:



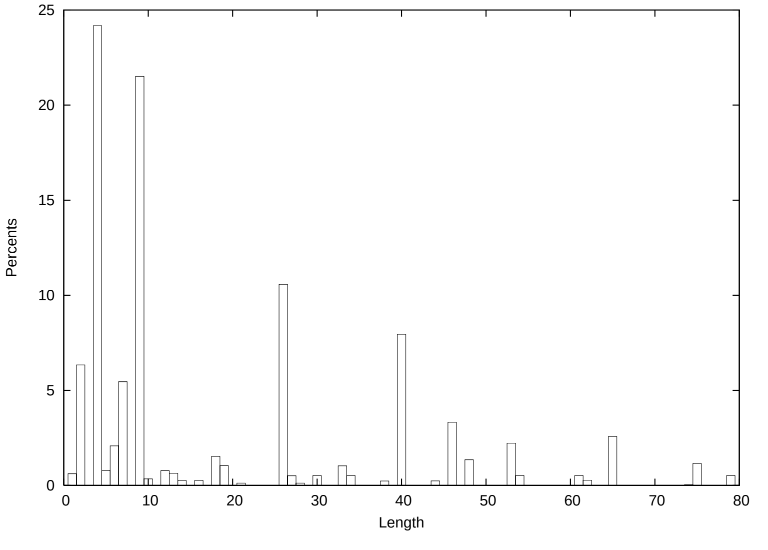
BFS Info

BFS height	234
BFS width	4,560 (1.1%)
Back level edges	66,785 (12.5%)

BFS level info:



Back level edges lengths:



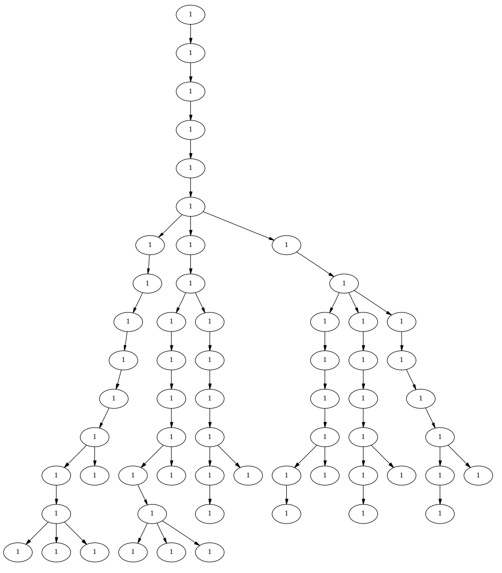
SCC Info

SCC components	132,041
SCC quetient height	183
SCC quetient nontrivial height	7
Number of terminal components	97,355
The largest component is	intermediate

Statistics according to **sizes**:

Size	Number of components	Number of states here
216,242	1	55.2%
40,622	1	10.3%
2,002	1	0.5%
2	408	0.2%
1	131,630	33.6%

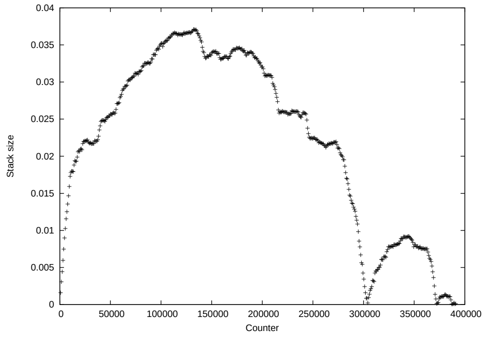
SCC component graph (part):



DFS Info

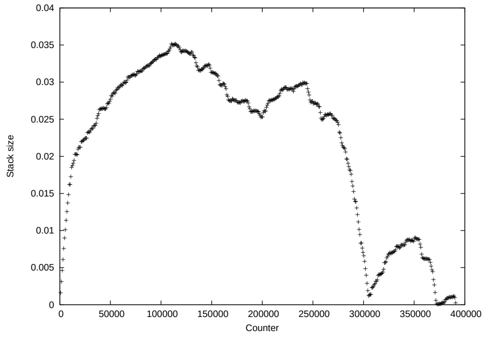
Run 0

front-edges : back-edges : cross-edges = 391,311 : 15,936 : 123,884 = 73.6%:3%:23.3%
Max. stack size: 15,412 (3.9%)
Shortest cycle detected: 2
Most often detected lengths of cycles: 2 (408), 34 (77), 71 (61), 336 (53), 137 (52)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 391,311 : 15,851 : 123,969 = 73.6%:2.9%:23.3%
Max. stack size: 14,584 (3.7%)
Shortest cycle detected: 2
Most often detected lengths of cycles: 2 (408), 34 (82), 71 (56), 46 (55), 56 (52)
Stack graph:



Local Structure

Short cycles(up to 6)

2	816	(0.2%)

Diamonds

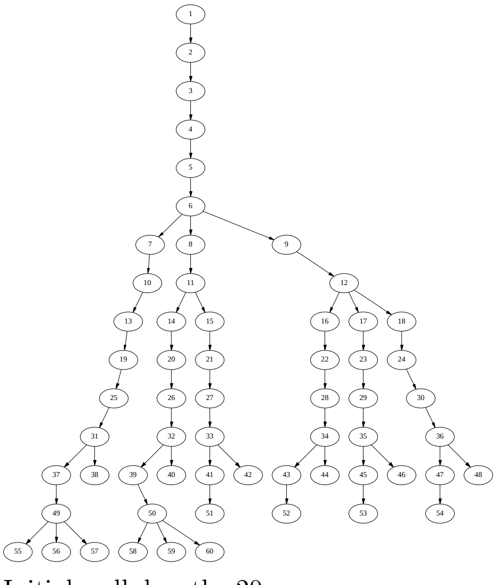
49,727 (12.7%)

Neighborhoods

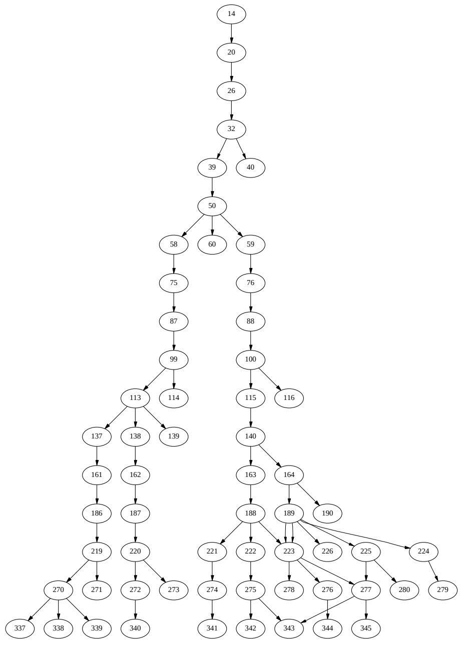
k	avg size	avg clustering
1	2.4	1
2	4.2	1.1
3	6.4	1.1
4	8.9	1.1

Visualization of some parts of the state state space:

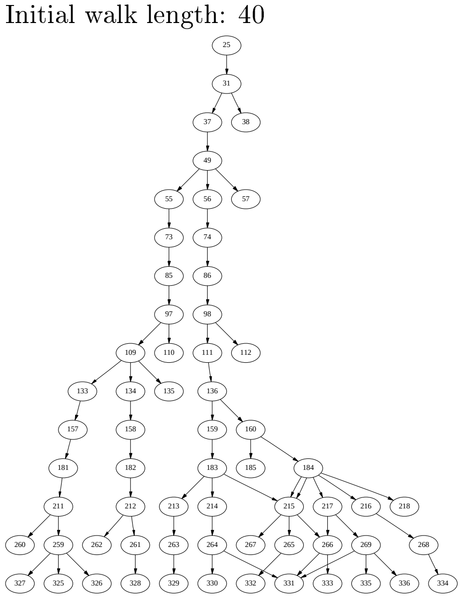
Initial walk length: 0



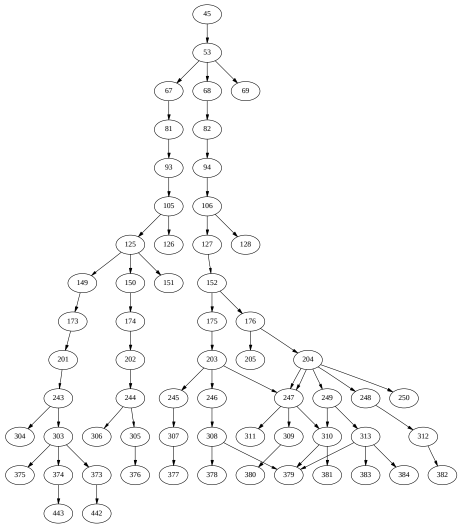
Initial walk length: 20



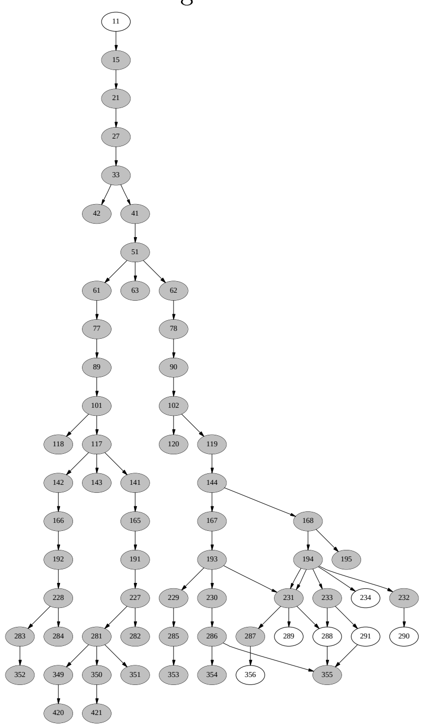
Initial walk length: 40



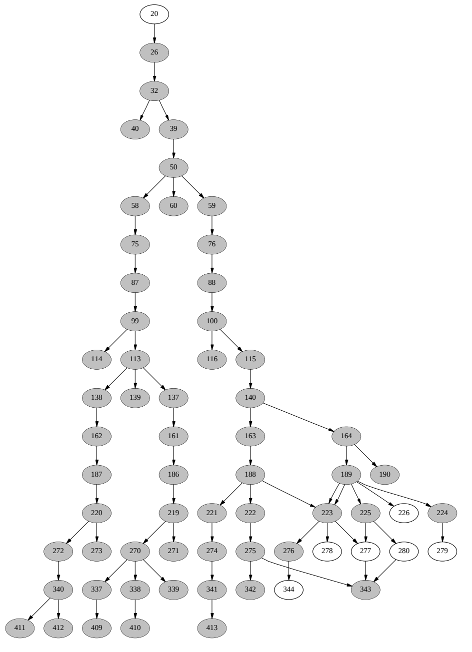
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60