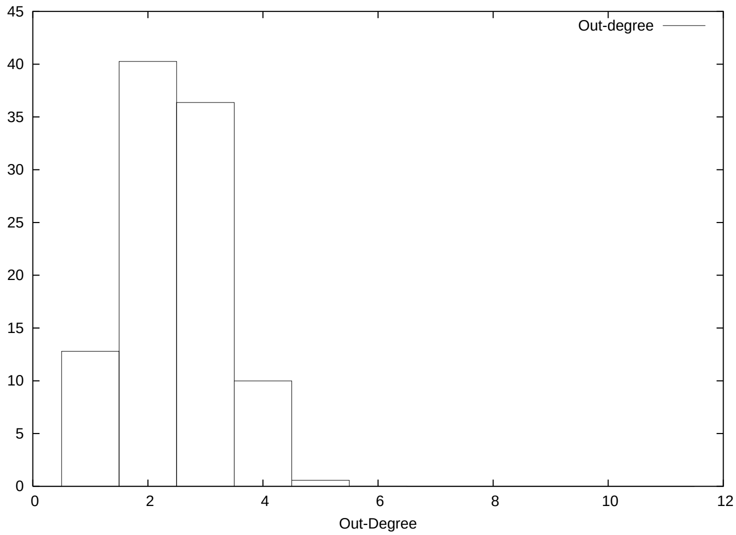
Graph: cadp/EXPERIMENT_03

General Info

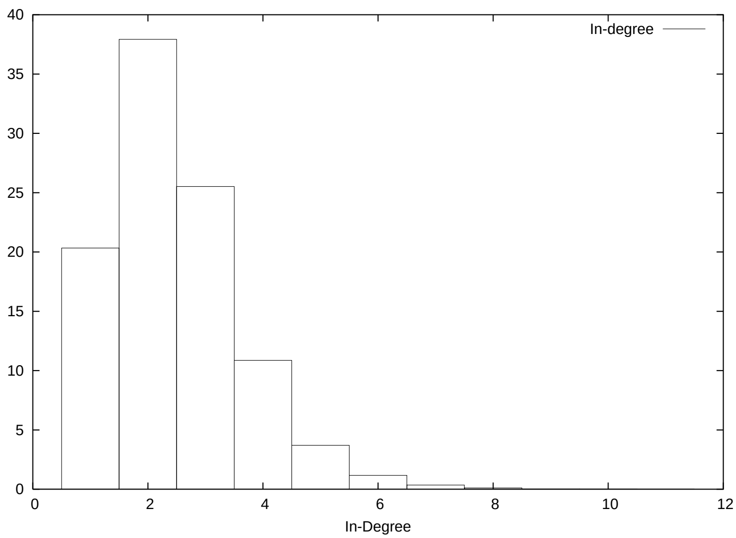
Example title	Distributed Leader Election Algorithms
Parameter	
Reduction	
Modification	

States	95,352
Edges	233,914
Average degree	2.4

Out-Degrees distribution:



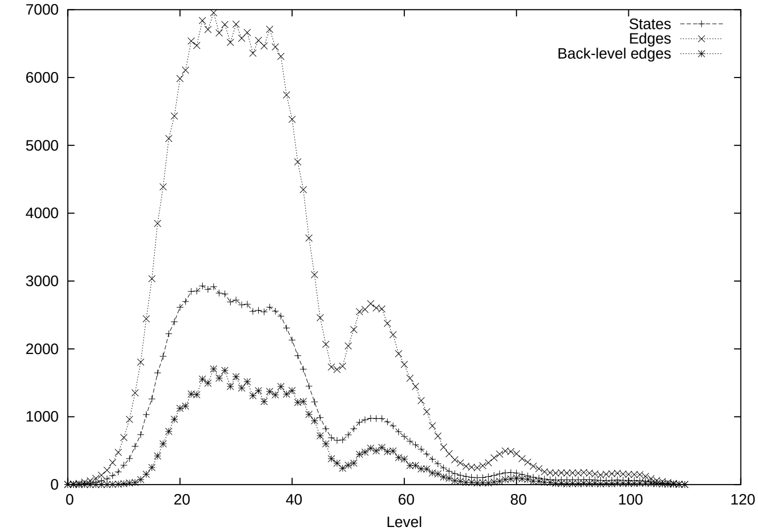
In-Degrees distribution:



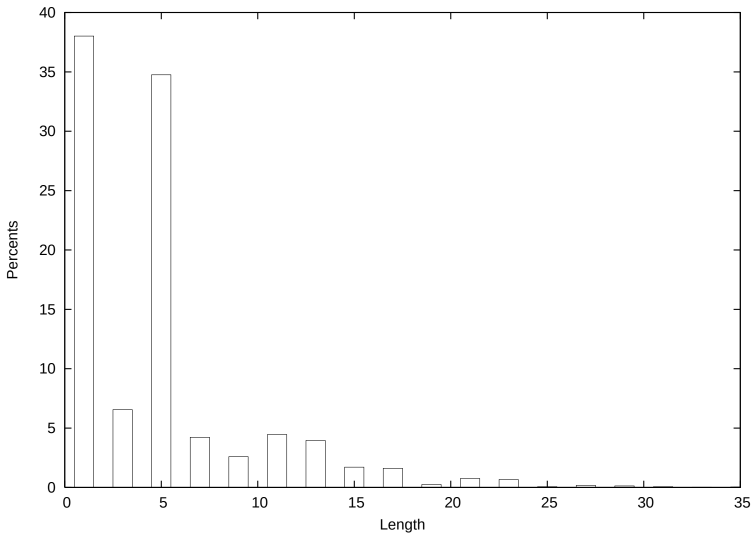
BFS Info

BFS height	110
BFS width	2,927 (3%)
Back level edges	47,361 (20.2%)

BFS level info:



Back level edges lengths:



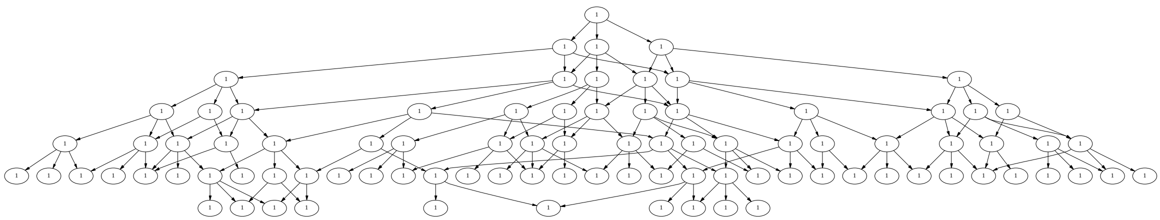
SCC Info

SCC components	27,048
SCC quetient height	217
SCC quetient nontrivial height	7
Number of terminal components	1
The largest component is	intermediate

Statistics according to **sizes**:

Size	Number of components	Number of states here
29,742	1	31.1%
18,357	1	19.2%
16,816	1	17.6%
3,393	1	3.5%
1	27,044	28.3%

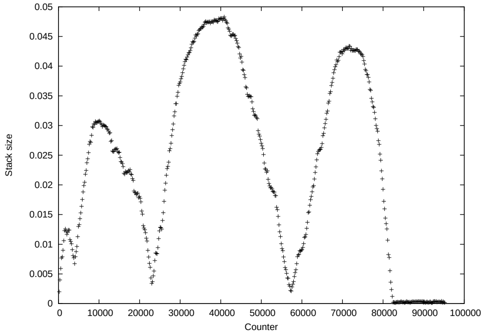
SCC component graph (part):



DFS Info

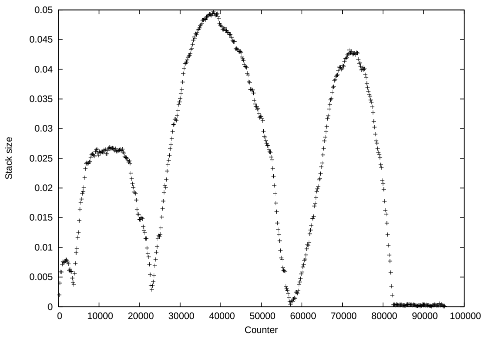
Run 0

front-edges : back-edges : cross-edges = 95,351 : 14,564 : 123,999 = 40.7%:6.2%:53%
Max. stack size: 4,610 (4.8%)
Shortest cycle detected: 6
Most often detected lengths of cycles: 12 (138), 10 (133), 220 (82), 144 (81), 118 (63)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 95,351 : 14,572 : 123,991 = 40.7%:6.2%:53%
Max. stack size: 4,753 (4.9%)
Shortest cycle detected: 6
Most often detected lengths of cycles: 10 (140), 12 (139), 22 (78), 62 (72), 76 (66)
Stack graph:



Local Structure

Short cycles(up to 6)

2	0	(0%)
3	0	(0%)
4	0	(0%)
5	0	(0%)
6	312	(0.3%)

Diamonds

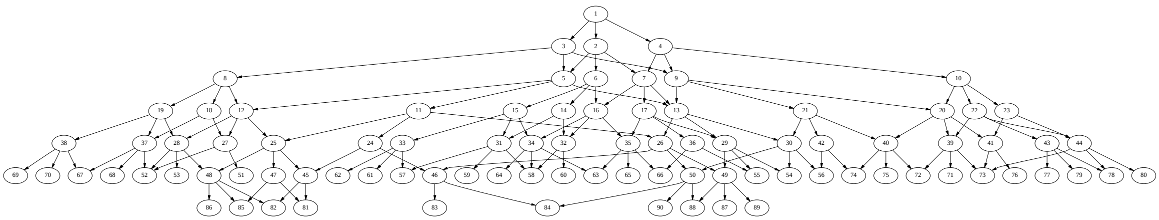
77,194 (80.9%)

Neighborhoods

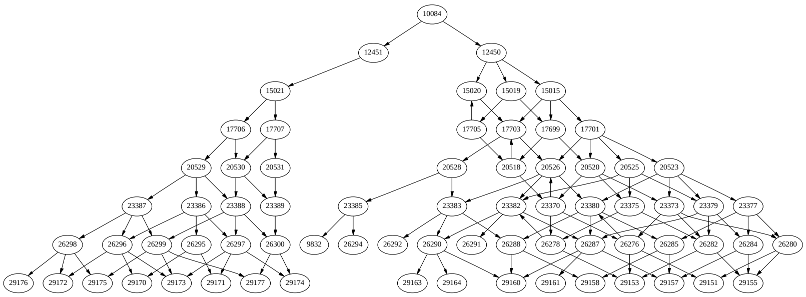
k	avg size	avg clustering
1	3.4	1
2	7.6	1.2
3	13.6	1.3
4	21.8	1.4

Visualization of some parts of the state state space:

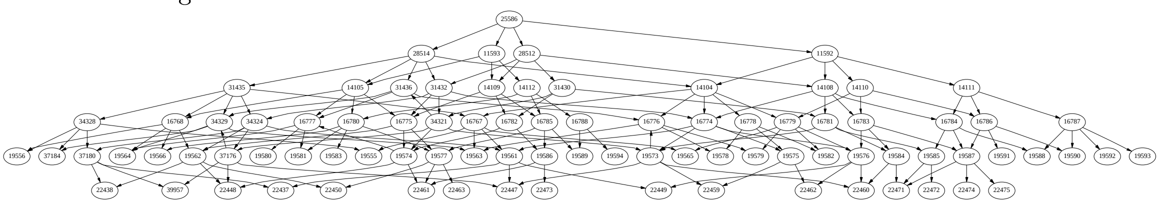
Initial walk length: 0



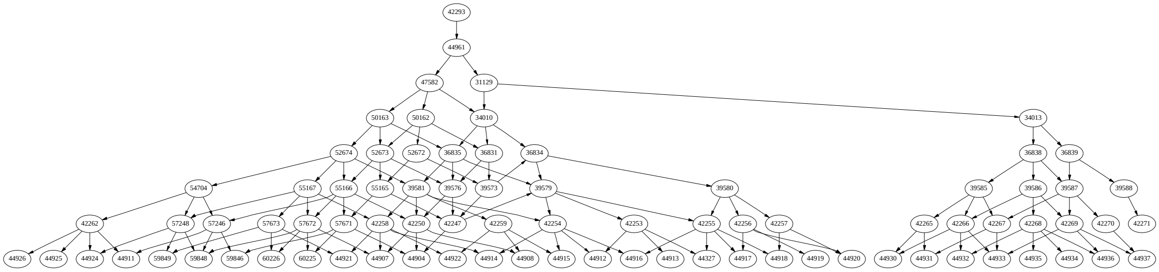
Initial walk length: 20



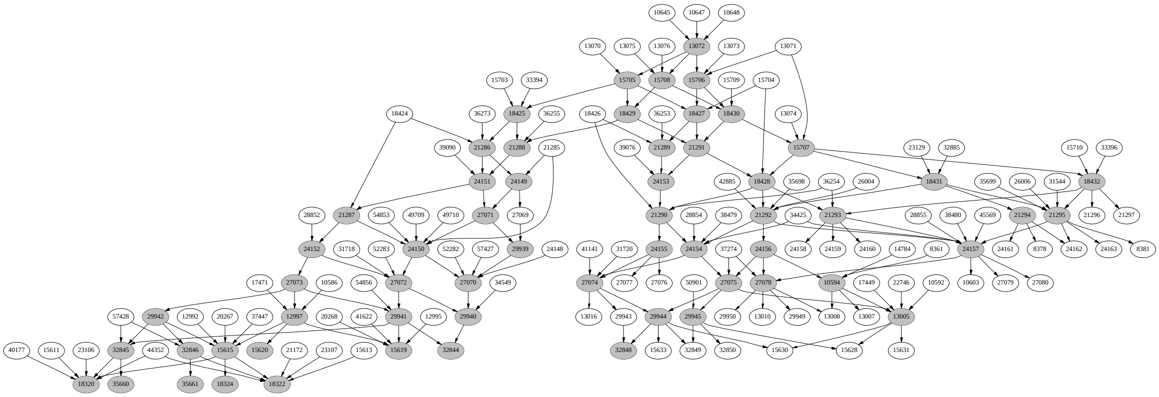
Initial walk length: 40



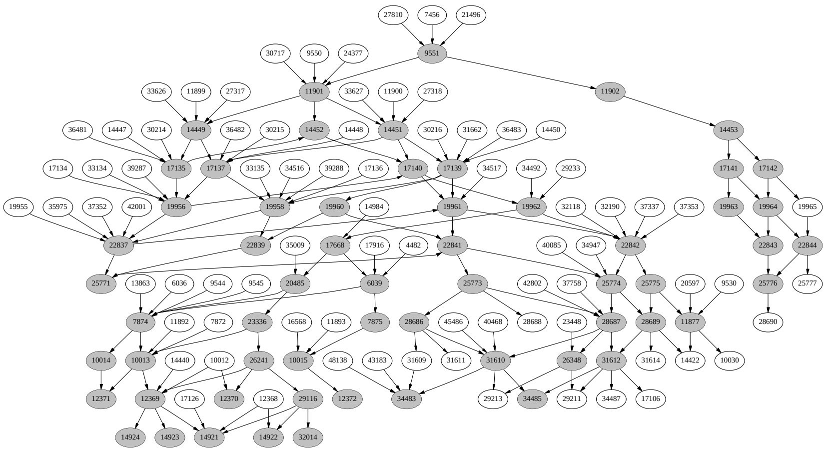
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60