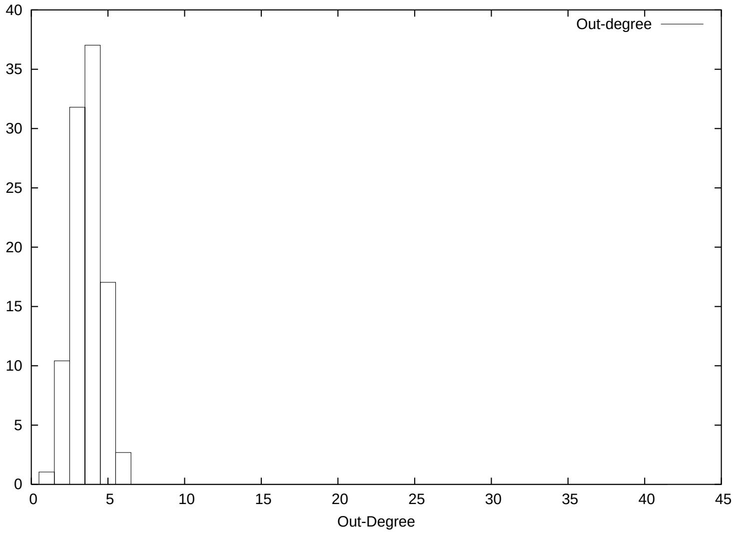
Graph: cadp/HAVi_asyn

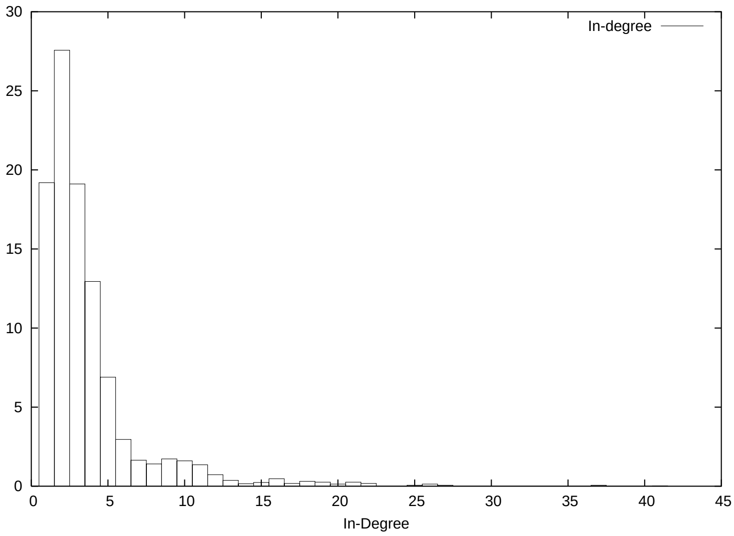
General Info

Example title	HAVi leader election protocol
Parameter	
Reduction	
Modification	asynchronous
States	5,107
Edges	18,725
Average degree	3.6

Out-Degrees distribution:



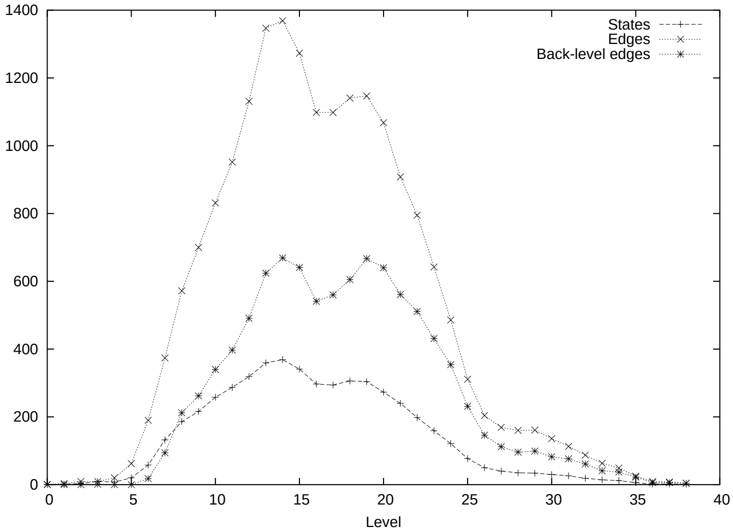
In-Degrees distribution:



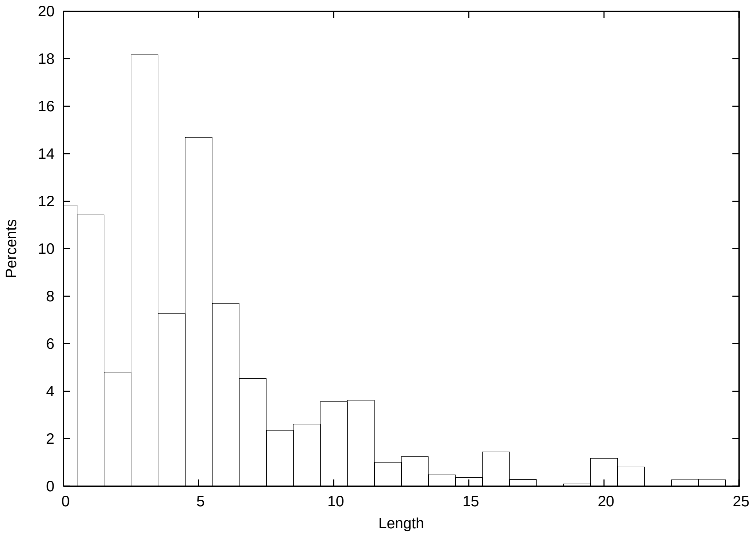
BFS Info

BFS height	38
BFS width	369 (7.2%)
Back level edges	9,638 (51.4%)

BFS level info:



Back level edges lengths:



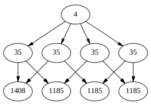
SCC Info

SCC components	9
SCC quetient height	2
SCC quetient nontrivial height	2
Number of terminal components	4
The largest component is	terminal

Statistics according to **sizes**:

Size	Number of components	Number of states here
1,408	1	27.5%
1,185	3	69.6%
35	4	2.7%
4	1	0%

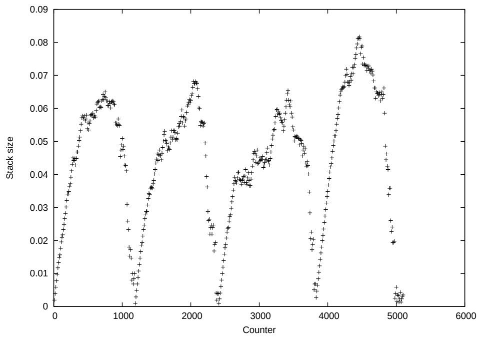
SCC component graph (part):



DFS Info

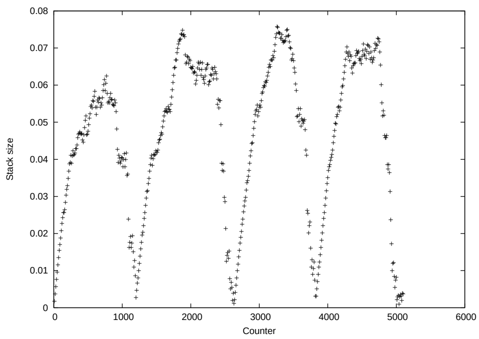
Run 0

front-edges : back-edges : cross-edges = 5,106 : 5,478 : 8,141 = 27.2%:29.2%:43.4%
Max. stack size: 423 (8.2%)
Shortest cycle detected: 4
Most often detected lengths of cycles: 4 (499), 6 (320), 11 (128), 7 (124), 12 (107)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 5,106 : 5,449 : 8,170 = 27.2%:29.1%:43.6%
Max. stack size: 389 (7.6%)
Shortest cycle detected: 4
Most often detected lengths of cycles: 4 (479), 6 (350), 7 (154), 11 (107), 12 (102)
Stack graph:



Local Structure

Short cycles(up to 6)

2	0	(0%)
3	0	(0%)
4	2,824	(55.2%)
5	0	(0%)
6	1,064	(20.8%)

Diamonds

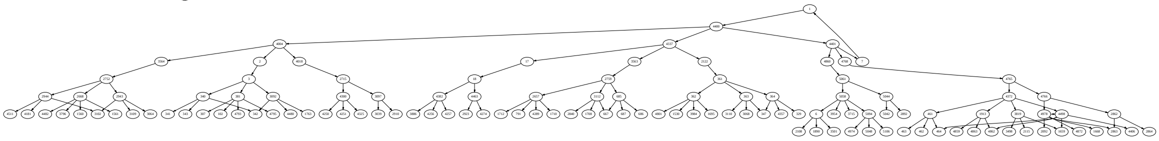
4,829 (94.5%)

Neighborhoods

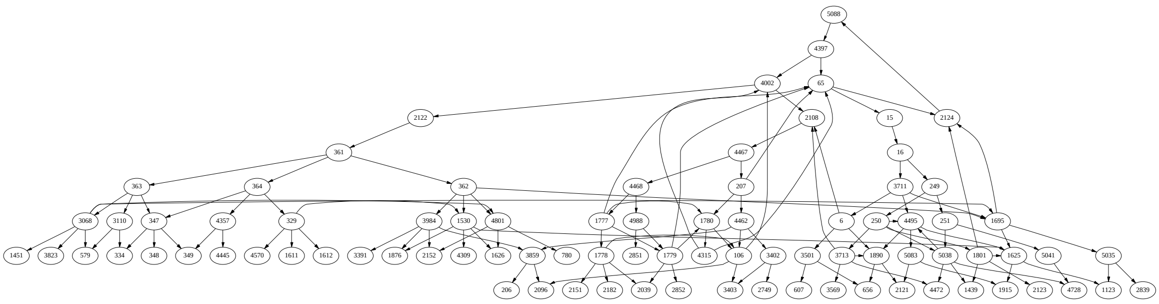
k	avg size	avg clustering
1	4.6	1
2	13.5	1.3
3	30.5	1.5
4	58.4	1.7

Visualization of some parts of the state state space:

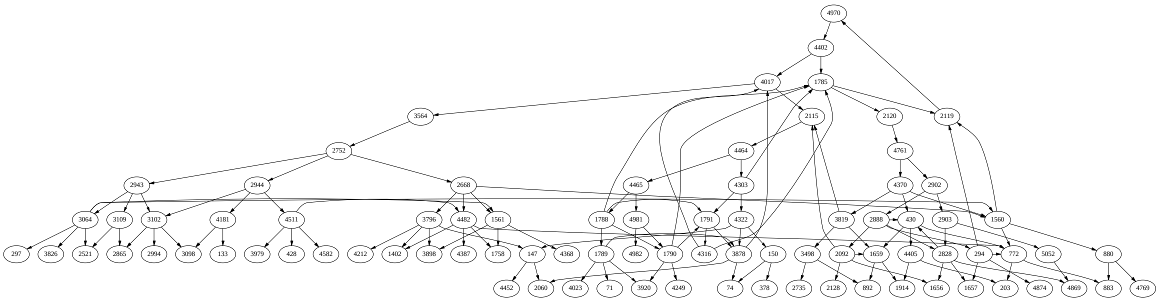
Initial walk length: 0



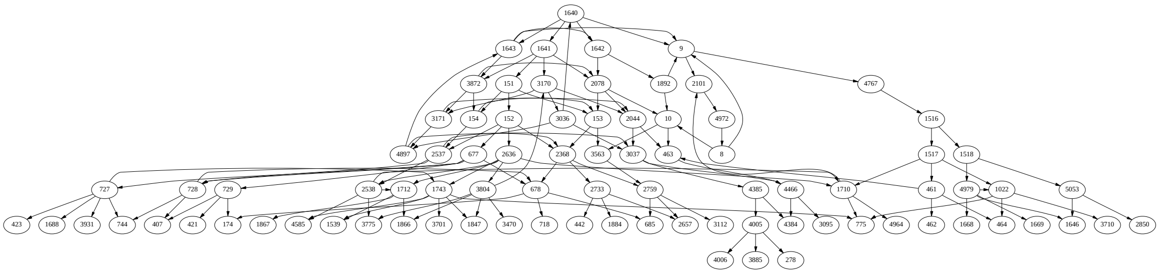
Initial walk length: 20



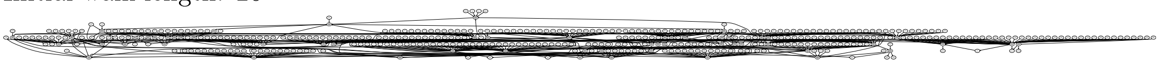
Initial walk length: 40



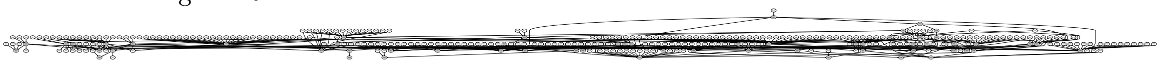
Initial walk length: 60



Initial walk length: 20



Initial walk length: 40



Initial walk length: 60