## **PSM Run Time Table**

N   G=2   G=3   G=4   G=5   G=6   G=2   G=3   G=4   G=5   G=6     4		Proposed Algorithm					<b>Brute-Force</b>				
5         -	N	G=2				G=6	G=2	G=3	G=4	G=5	G=6
6         ~0ms         -	4	~0ms	-	-	-	-	~0ms	-	-	-	-
7         -		-	-	-	-	-	-	-	-	-	-
8       ~0ms       -       -       -       ~0ms       -        -       -       -       -       -       -       -       -       -       -       -       -       -       -       -        -		~0ms	-	-	-	-	~0ms	-	-	-	-
9			-	-	-	-		-	-	-	-
10       ~0ms       -       -       -       3,1ms       -       -       -         11       -       -       -       -       -       -       -       -       -         12       0,1ms       ~0ms       -        - <td></td> <td>~0ms</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>~0ms</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>		~0ms	-	-	-	-	~0ms	-	-	-	-
11       -			~0ms	-	-	-		0,3ms	-	-	-
12       0,1ms       ~0ms       -			-	-	-	-		-	-	-	-
13       -			-	-	-	-		-	-	-	-
14       0,1ms       -       -       -       30ms       -       -       -       -         15       -       0,1ms       -       -       -       70ms       -       -       -         16       0,2ms       -       -       -       61ms       -       -       -       -         17       -				-	-	-			-	-	-
15         -         0,1ms         -         -         -         70ms         -				-	-	-		-	-	-	-
16       0,2ms       -       ~0ms       -       -       61ms       -       ~0ms       -       -         17       -		· 1		-	-	-		-	-	-	-
17       -				-	-	-			-	-	-
18       0,2ms       0,1ms       -       -       -       6,4s       1,2s       -       -       -         19       -				~0ms	-	-			~0ms	-	-
19       -				-	-	-				-	-
20       0,3ms       -       0,4ms       -       -       88s       -       0,7s       -       -         21       -       0,2ms       -       -       -       0,6s       -       -       -         22       0,4ms       -       -       -       1096s       -       -       -       -         23       - <td></td> <td>0,2ms</td> <td></td> <td></td> <td>-</td> <td>-</td> <td>· '</td> <td></td> <td></td> <td>-</td> <td>-</td>		0,2ms			-	-	· '			-	-
21       -       0,2ms       -       -       -       0,6s       -       -       -         22       0,4ms       -       -       -       1096s       -       -       -       -         23       - <td></td> <td>-</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td>		-			-					-	-
22       0,4ms       -       -       -       1096s       -       -       -       -         23       -       <					-	-				-	-
23       -					-					-	-
24       0,5ms       0,5ms       0,9ms       -       -       x       5,1s       3,8s       -       -         25       -       -       -       0,1ms       -       -       -       0,3s       -         26       0,7ms       -       -       -       x       -       -       -       -         27       -       1ms       -       -       -       54s       -       -       -         28       0,9ms       -       2,6ms       -       -       x       -       3,7s       -       -         29       -       -       -       -       x       x       -       -       -         30       1,2ms       2ms       -       1,1s       -       x       x       x       -       -       -         31       -<		· 1	-	-	-					-	-
25 0,1ms 0,3s - 26 0,7ms X			-	-	-					-	-
26       0,7ms       - <td></td> <td>· 1</td> <td>,</td> <td>,</td> <td>- 0.1</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td>		· 1	,	,	- 0.1					-	-
27       -       1ms       -       -       -       54s       -       -       -         28       0,9ms       -       2,6ms       -       -       x       -       3,7s       -       -         29       -       -       -       -       -       -       -       -       -         30       1,2ms       2ms       -       1,1s       -       x       x       -       x       -         31       -				-	,	-			-	0,38	-
28       0,9ms       -       2,6ms       -       -       x       -       3,7s       -       -         29       -       -       -       -       -       -       -       -       -         30       1,2ms       2ms       -       1,1s       -       x       x       -       x       -         31       -				-	-	-			-	-	-
29       -				2 6	-	-				-	-
30     1,2ms     2ms     -     1,1s     -     x     x     -     x     -       31     -     -     -     -     -     -     -     -     -       32     1,8ms     -     8,6ms     -     -     x     -     0,5s     -       33     -     5,5ms     -     -     -     x     -     -     -       34     2,3ms     -     -     -     x     -     -     -     -       35     -     -     -     1,2s     -     -     -     x     -     -     x       36     3ms     8,8ms     25ms     -     0,2ms     x     x     102s     -     215s		· 1		2,6ms		-	1			-	-
31     -     -     -     -     -     -     -     -       32     1,8ms     -     8,6ms     -     -     x     -     0,5s     -     -       33     -     5,5ms     -     -     -     x     -     -     -       34     2,3ms     -     -     -     x     -     -     -     -       35     -     -     -     1,2s     -     -     -     x     -       36     3ms     8,8ms     25ms     -     0,2ms     x     x     102s     -     215s				-							-
32     1,8ms     -     8,6ms     -     -     x     -     0,5s     -     -       33     -     5,5ms     -     -     -     x     -     -     -       34     2,3ms     -     -     -     x     -     -     -     -       35     -     -     -     1,2s     -     -     -     x     -       36     3ms     8,8ms     25ms     -     0,2ms     x     x     102s     -     215s					1,18	-				Х	-
33     -     5,5ms     - <td< td=""><td></td><td></td><td></td><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td>-</td><td>-</td></td<>					-	-				-	-
34   2,3ms   x   x   35     1,2s   x   x -   36   3ms   8,8ms   25ms -   0,2ms   x   x   102s -   215s		· 1		,						-	-
35   1,2s x - 36   3ms										-	-
36 3ms 8,8ms 25ms - 0,2ms x x 102s - 215s							1			_	-
											- 215e
37	37	51118			_		_ X	Λ -	1028	_	21J8 -
38   4,3ms x					_			_	_	_	_
39 - 19ms x				_	_					_	_
40   7,2ms -   72ms   1,7s -   x -   x x -				72ms	1,7s	-				X	-

Table 1: The Table shows the average computation time needed to generate a single complete sequence for specific configurations (n,g). Run time tests were conducted on an i5 2500k without parallel computing (only a single core was used). For large problem instances, it was not possible to measure the brute-force run time due to its substantial increase in computation time.