Table 1: Results of the 1D simulation for $N=10,\,N_{samples}=1000.$

		Numerical		Analytical		
T	β	$U/N \times 10^{-3}$	C /N × 10^{-3}	$U/N \times 10^{-3}$	C /N × 10^{-3}	accuracy
0.2	5.000	-900.0	0.	-999.9	4.540	
0.4	2.500	-899.8	2.500	-986.6	166.2	-31.855
0.6	1.667	-832.9	420.9	-931.1	369.5	0.880
0.8	1.250	-771.1	450.4	-848.3	438.2	0.936
1.0	1.000	-707.4	419.4	-761.6	420.0	0.961
1.2	0.833	-642.7	269.4	-682.3	371.2	0.780
1.4	0.714	-537.6	240.7	-613.4	318.3	0.768
1.6	0.625	-467.0	222.6	-554.6	270.5	0.799
1.8	0.556	-431.9	247.5	-504.7	230.0	0.880
2.0	0.500	-427.9	198.3	-462.1	196.6	0.956
2.2	0.455	-369.1	137.4	-425.6	169.2	0.808
2.4	0.417	-343.0	130.6	-394.1	146.6	0.864
2.6	0.385	-316.0	124.5	-366.7	128.0	0.905
2.8	0.357	-312.4	105.7	-342.7	112.6	0.919
3.0	0.333	-320.8	75.44	-321.5	99.63	0.839
3.2	0.313	-290.8	92.56	-302.7	88.71	0.959
3.4	0.294	-292.4	82.43	-285.9	79.43	0.971
3.6	0.278	-234.3	59.29	-270.9	71.50	0.819
3.8	0.263	-227.1	56.34	-257.3	64.67	0.860
4.0	0.250	-203.3	51.95	-244.9	58.75	0.832