VMC for Helium

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PH21B011

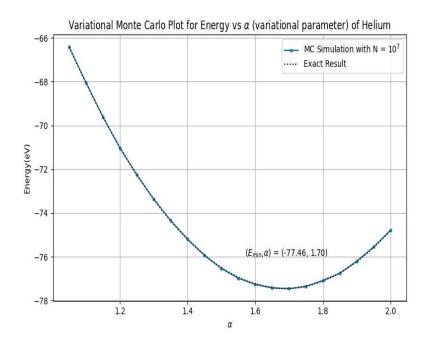
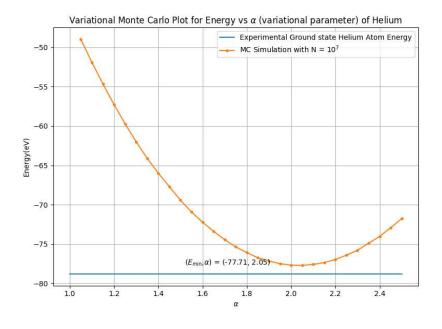


Table 1: VMC for Helium without cusp				
alpha	Energy(a.u)	Energy(eV)	Variance	
1.05	-2.44	-66.43	1.72	
1.10	-2.50	-68.09	1.75	
1.15	-2.56	-69.60	1.73	
1.20	-2.61	-71.01	1.67	
1.25	-2.66	-72.23	1.58	
1.30	-2.70	-73.37	1.51	
1.35	-2.74	-74.39	1.47	
1.40	-2.76	-75.20	1.35	
1.45	-2.79	-75.91	1.27	
1.50	-2.81	-76.51	1.17	
1.55	-2.83	-76.97	1.08	
1.60	-2.84	-77.23	1.01	
1.65	-2.84	-77.37	0.91	
1.70	-2.85	-77.46	0.87	
1.75	-2.84	-77.32	0.83	
1.80	-2.84	-77.12	0.81	
1.85	-2.82	-76.80	0.80	
1.90	-2.80	-76.24	0.92	



T	able 2: VMC fo	or Helium with	cusp
alpha		Energy(eV)	
1.05	-1.80	-48.98	1.09
1.10	-1.91	-51.91	1.27
1.15	-2.01	-54.66	1.20
1.20	-2.11	-57.27	1.18
1.25	-2.20	-59.72	1.16
1.30	-2.28	-62.00	1.17
1.35	-2.36	-64.11	1.14
1.40	-2.43	-65.99	1.09
1.45	-2.49	-67.70	1.03
1.50	-2.55	-69.43	0.95
1.55	-2.61	-70.93	0.88
1.60	-2.66	-72.23	0.79
1.65	-2.70	-73.38	0.69
1.70	-2.74	-74.45	0.61
1.75	-2.77	-75.37	0.52
1.80	-2.80	-76.08	0.44
1.85	-2.82	-76.75	0.39
1.90	-2.84	-77.15	0.30
1.95	-2.85	-77.51	0.26
2.00	-2.86	-77.69	0.25
2.05	-2.86	-77.71	0.25
2.10	-2.85	-77.60	0.29
2.15	-2.84	-77.36	0.38
2.20	-2.83	-76.97	0.51
2.25	-2.81	-76.42	0.68
2.30	-2.79	-75.79	0.88
2.35	-2.75	-74.91	1.25
2.40	-2.72	-74.03	1.56
2.45	-2.68	-72.93	1.97
2.50	-2.64	-71.76	2.50