N	$\mu_c^{(N)}$	ρ_0	ρ_1	χ_0	χ^2/DOF			
$\beta = 0.43$								
0	0.82444(3)	0.2114(2)	0.2713(2)	2.349(4)	1.23	1.43	0.70	0.58
1	1.22462(2)	0.2715(2)	0.2983(2)	2.817(4)	0.52	0.50	1.04	0.81
2	1.51567(2)	0.298(1)	0.312(1)	3.013(4)	0.73	0.70	1.20	1.28
3	1.74436(2)	0.313(1)	0.321(1)	3.121(4)	1.02	1.02	0.78	1.14
$\beta = 0.50$								
0	0.63275(3)	0.288(1)	0.336(1)	2.63(1)	0.58	0.56	1.33	0.68
1	1.05865(2)	0.339(1)	0.362(1)	2.957(9)	0.72	0.69	0.71	1.47
2	1.35787(2)	0.364(1)	0.376(1)	3.116(8)	0.89	0.85	1.37	0.94
3	1.58951(2)	0.377(1)	0.386(1)	3.212(8)	0.57	0.54	1.07	1.00
$\beta = 0.20$								
0	1.9141(1)	0.0414(2)	0.0884(2)	1.458(9)	0.55	0.52	0.47	0.81
1	2.12263(9)	0.0884(2)	0.1106(3)	2.14(1)	0.41	0.40	1.38	0.98
2	2.33075(8)	0.1109(2)	0.1178(3)	2.40(1)	0.43	0.34	1.02	1.67
3	2.52196(8)	0.1186(3)	0.1150(2)	2.48(1)	0.56	0.52	1.36	1.17

TABLE I: Parameters of effective quantum mechanics that describes the data for the $L = 2$ lattice at $\beta = 0.43$.

and L_t is sufficiently large. The corresponding effective parameters are tabulated in Tabs. II, III and IV. The fits always give reasonable χ^2/DOF, which are shown in the last four columns, one for each observable. We note that as β becomes smaller, $\mu_c^{(0)}$ becomes larger while $\mu_c^{(1)} - \mu_c^{(0)}$ becomes smaller. This is the reason it becomes difficult to match the data to an effective quantum mechanics description at small β without going to very large L_t. Note also that the value of $\mu_c^{(0)}$ has approximately reached the thermodynamic limit at $\beta = 0.2$ for $L = 8$. We plot our four observables near $\mu_c^{(0)}$ at $L = 16$ and $\beta = 0.43$ in Fig. 6 and at $L = 6$ and $\beta = 0.2$ in Fig. 7 along with the fits.