

Bohr Hamiltonian Calculations for the Cd Isotopic Chain

David Muir

October 23, 2021

List of Figures

1	Bohr Hamiltonian calculations for the 2_1 states of the Cd isotopic chain with the UNEDF0 functional.	2
2	Bohr Hamiltonian calculations for the 3_1 states of the Cd isotopic chain with the UNEDF0 functional.	2
3	Bohr Hamiltonian calculations for the 4_1 states of the Cd isotopic chain with the UNEDF0 functional.	3
4	Bohr Hamiltonian calculations for the 5_1 states of the Cd isotopic chain with the UNEDF0 functional.	3
5	Bohr Hamiltonian calculations for the 6_1 states of the Cd isotopic chain with the UNEDF0 functional.	3
6	Bohr Hamiltonian calculations for the 7_1 states of the Cd isotopic chain with the UNEDF0 functional.	4
7	Bohr Hamiltonian calculations for the 8_1 states of the Cd isotopic chain with the UNEDF0 functional.	4
8	Bohr Hamiltonian calculations for the 0_2 states of the Cd isotopic chain with the UNEDF0 functional.	4
9	Cd isotopic chain potential energy surfaces.	6

Cd Isotopic Chain Analysis

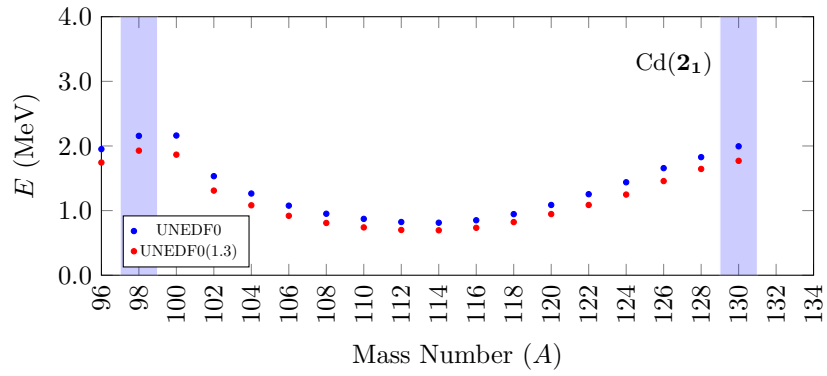


Figure 1: Bohr Hamiltonian calculations for the 2_1 states of the Cd isotopic chain with the UNEDF0 functional.

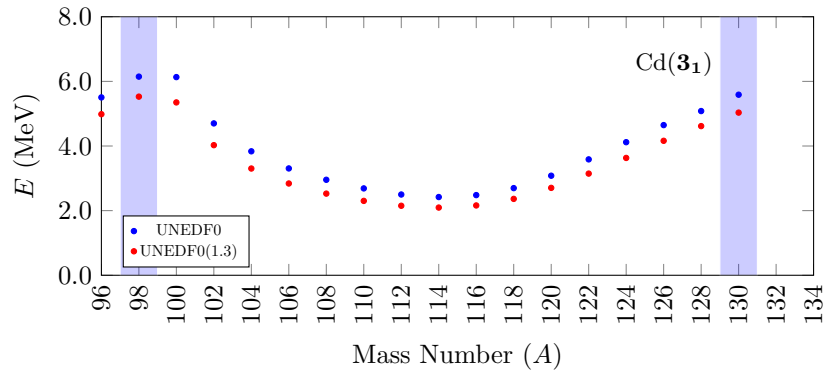


Figure 2: Bohr Hamiltonian calculations for the 3_1 states of the Cd isotopic chain with the UNEDF0 functional.

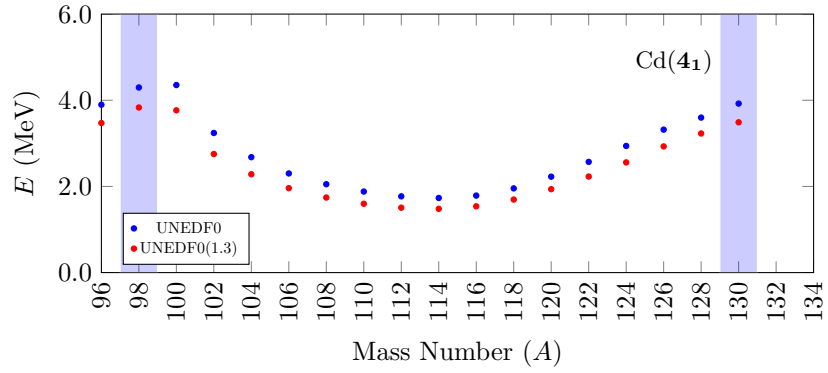


Figure 3: Bohr Hamiltonian calculations for the 4_1 states of the Cd isotopic chain with the UNEDF0 functional.

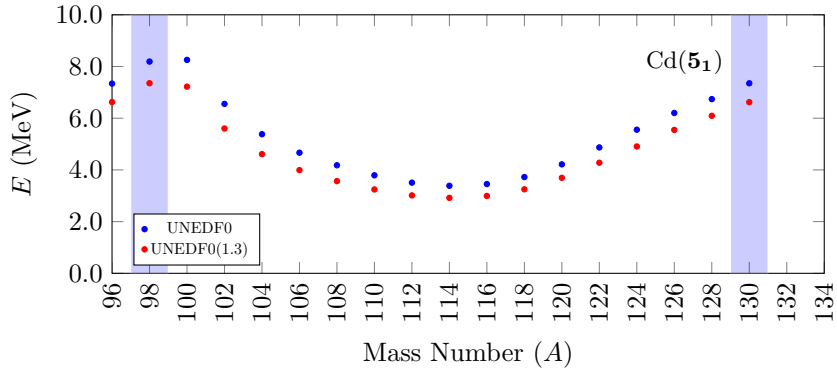


Figure 4: Bohr Hamiltonian calculations for the 5_1 states of the Cd isotopic chain with the UNEDF0 functional.

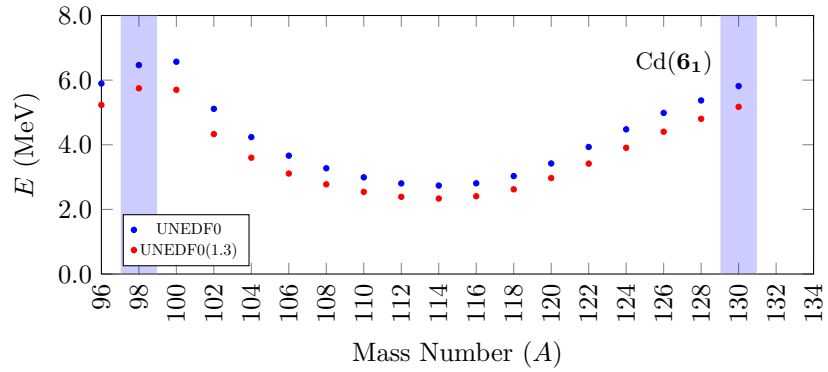


Figure 5: Bohr Hamiltonian calculations for the 6_1 states of the Cd isotopic chain with the UNEDF0 functional.

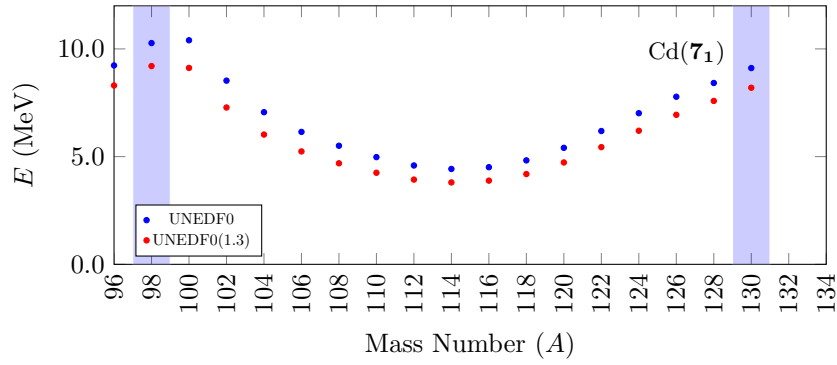


Figure 6: Bohr Hamiltonian calculations for the 7_1 states of the Cd isotopic chain with the UNEDF0 functional.

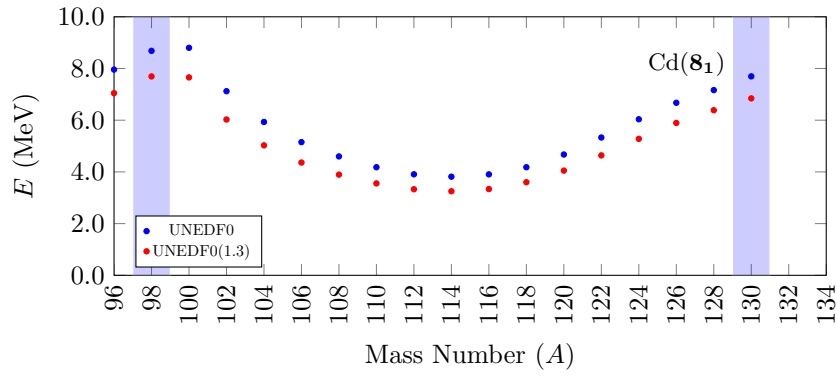


Figure 7: Bohr Hamiltonian calculations for the 8_1 states of the Cd isotopic chain with the UNEDF0 functional.

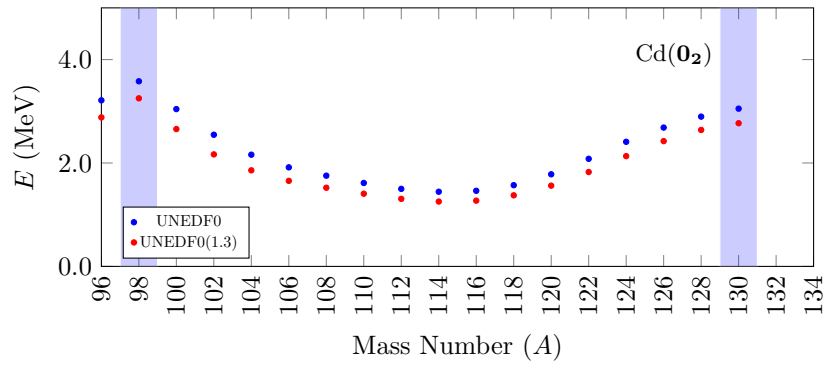
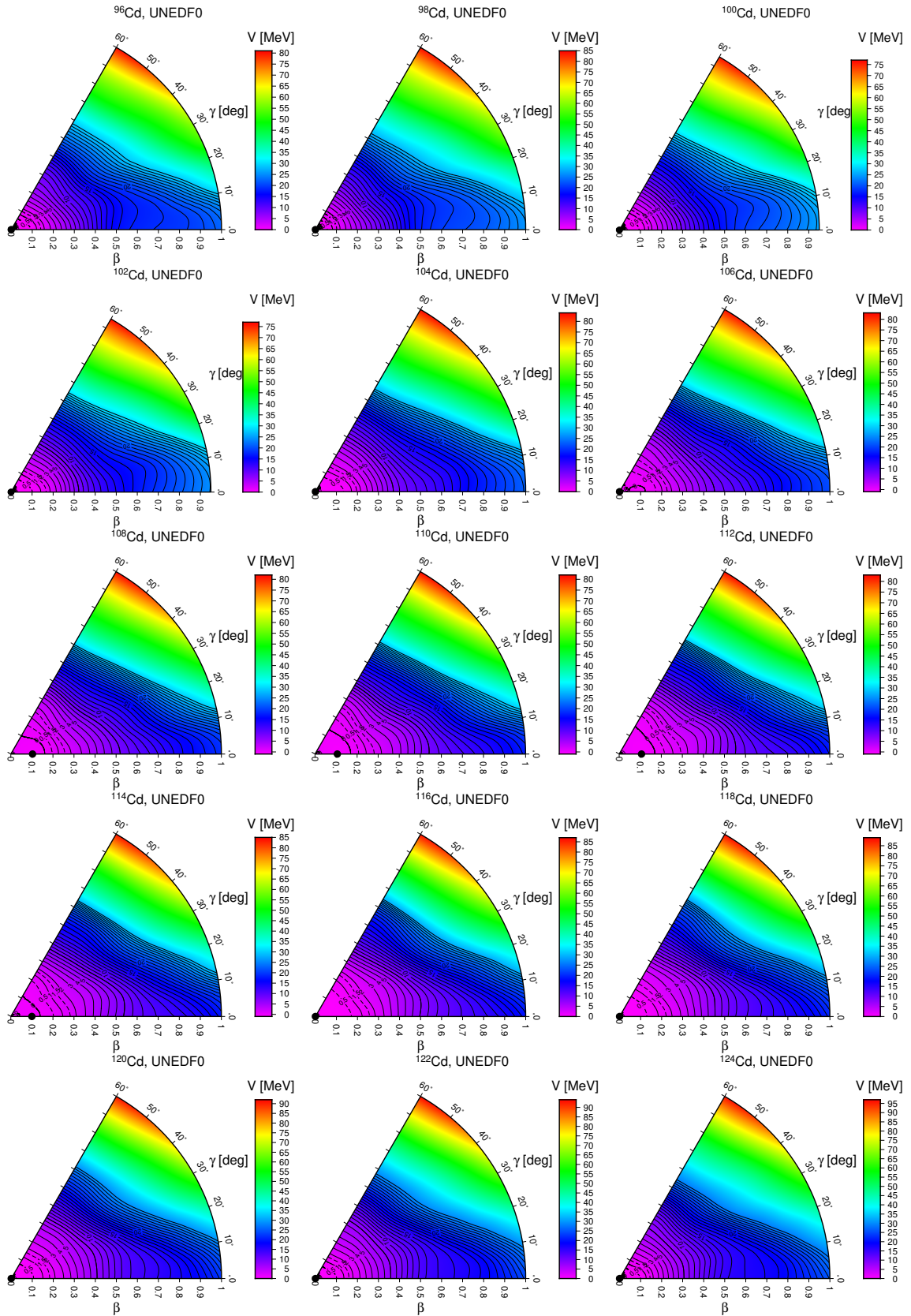


Figure 8: Bohr Hamiltonian calculations for the 0_2 states of the Cd isotopic chain with the UNEDF0 functional.



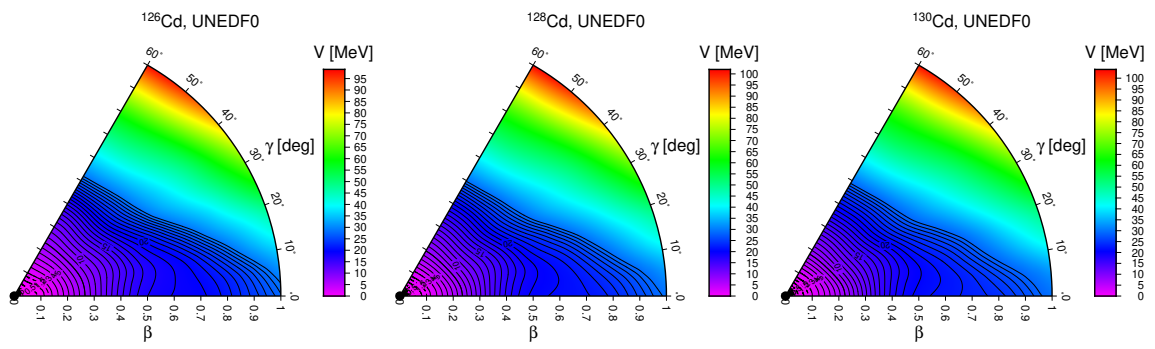


Figure 9: Cd isotopic chain potential energy surfaces.