Plots for Alpha Formation in Mostly Neutron Matter

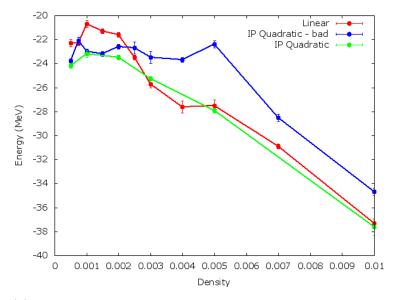
Cody L. Petrie

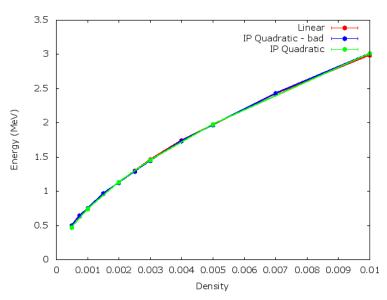
January 24, 2019

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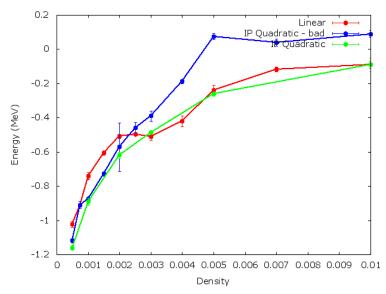
1 Total Energy Plots for Alpha, 14n, and 14n2p





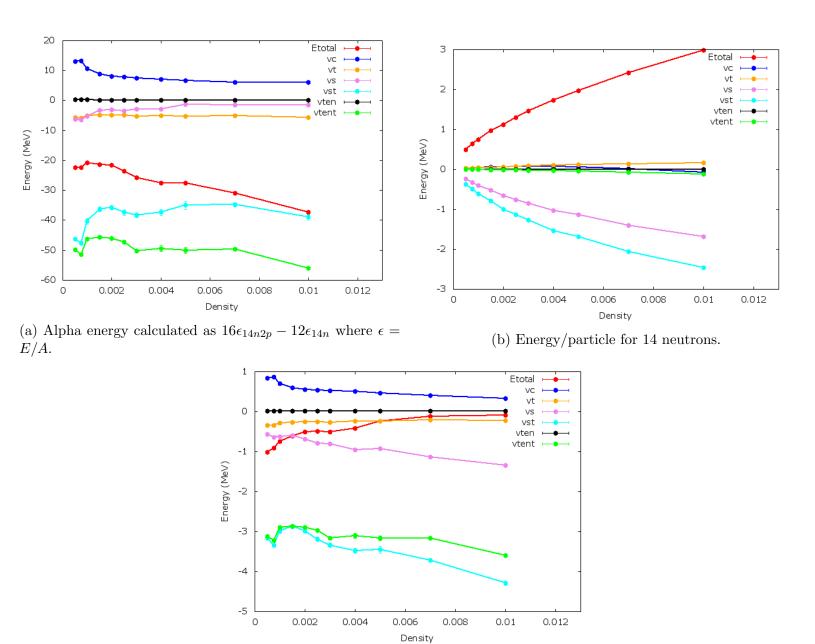
(a) Alpha energy calculated as $16\epsilon_{14n2p}-12\epsilon_{14n}$ where $\epsilon=E/A.$

(b) Energy/particle for 14 neutrons.



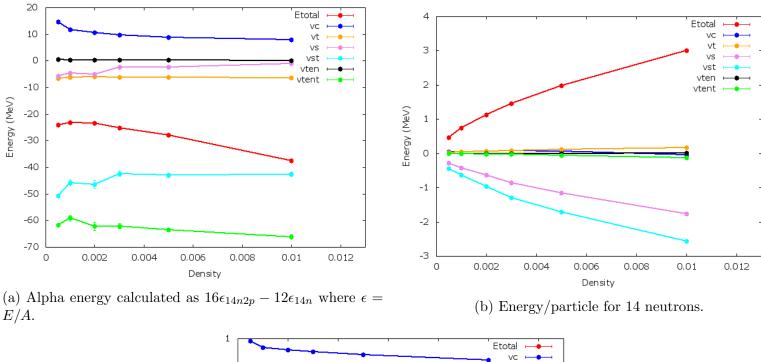
(c) Energy/particle for 14 neutrons + 2 protons.

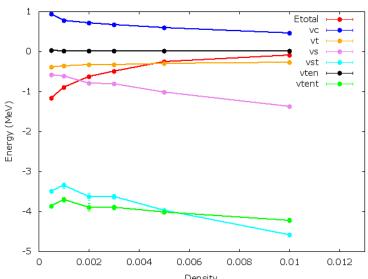
2 Breakdown of AV6' Potential Pieces with Linear Correlations



(c) Energy/particle for 14 neutrons + 2 protons.

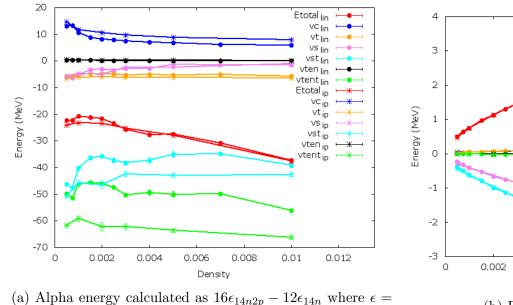
3 Breakdown of AV6' Potential Pieces with IP Correlations

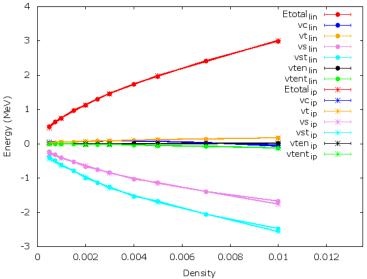




(c) Energy/particle for 14 neutrons + 2 protons.

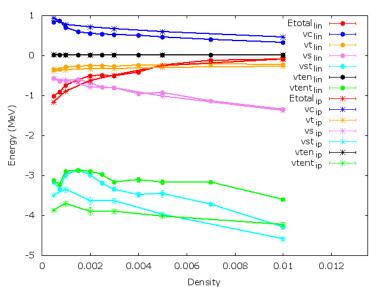
4 Breakdown of AV6' Potential Pieces with Both Linear and IP Correlations





(a) Alpha energy calculated as $16\epsilon_{14n2p} - 12\epsilon_{14n}$ where $\epsilon = E/A$.

(b) Energy/particle for 14 neutrons.



(c) Energy/particle for 14 neutrons + 2 protons.