

# An Introduction to Parallel Processing

Home assignment #4

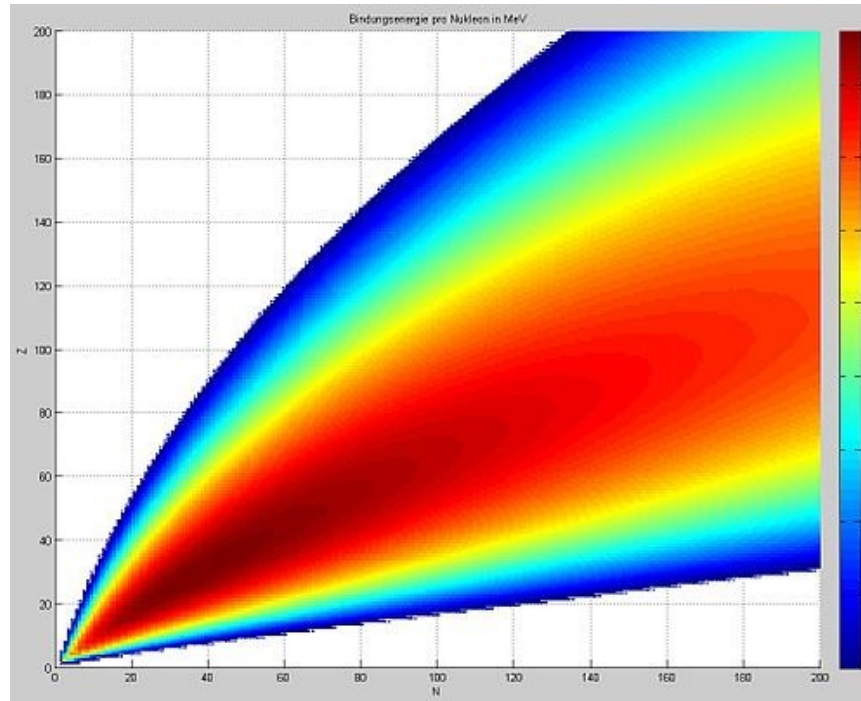
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# The semi-empirical binding energy formula

- Reference:  
[http://en.wikipedia.org/wiki/Semi-empirical\\_mass\\_formula](http://en.wikipedia.org/wiki/Semi-empirical_mass_formula)

- $$E_B = a_V A - a_S A^{2/3} - a_C \frac{Z^2}{A^{1/3}} - a_A \frac{(A - 2Z)^2}{A} - \delta(A, Z)$$



# 200x200 computations

- Submit 200 jobs to HTCondor, each will compute 200 points,  $N=1..200$  and  $Z=1..200$
- Post-process the output files to plot  $Z$  vs  $N$  binding energy surface using tool such as Matlab.
- Submit: Your code, your submit file, the final plot and any other documentation/instructions which you think are relevant.