

Theoretical Method	Current computational dependence on molecular size, N	Estimate of maximum feasible molecular size in 1996	Current estimate of maximum feasible molecular size
FCI	$N!$	2 atoms	3 atoms
CCSD(T)	N^7	8-12 atoms	20 atoms
CCSD	N^6	10-15 atoms	30 atoms
MP2	N^5	25-50 atoms	75-100 atoms
HF, KS-DFT	N^2 - N^3	50-200 atoms	300-500 atoms

Figure 1.1 Computational scaling of the standard electronic structure methods. The data in the three first columns was taken from Ref. (30). The data in the fourth column is our estimate.

30. Head-Gordon, M. J. Phys. Chem. 100, 13213 (1996).