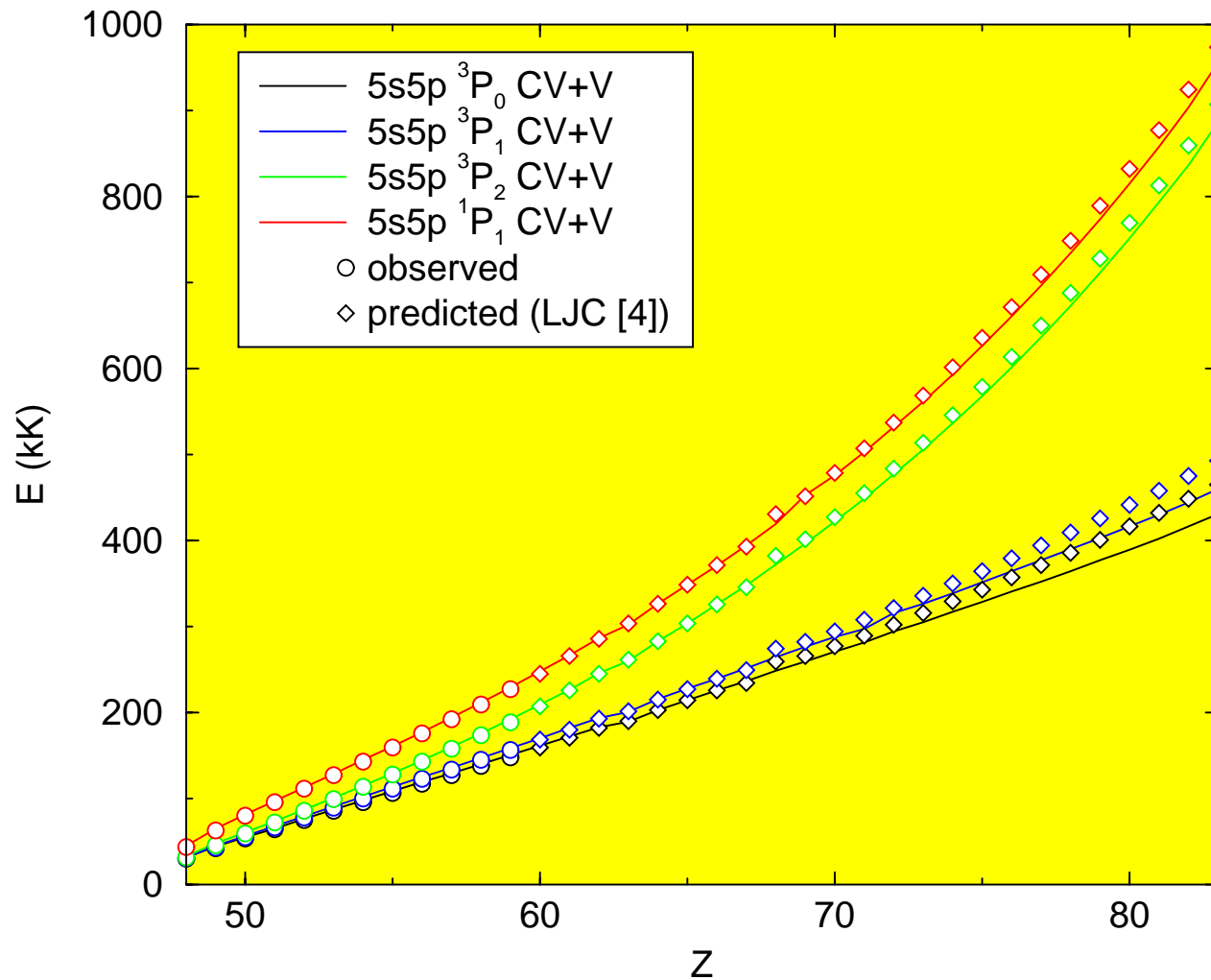
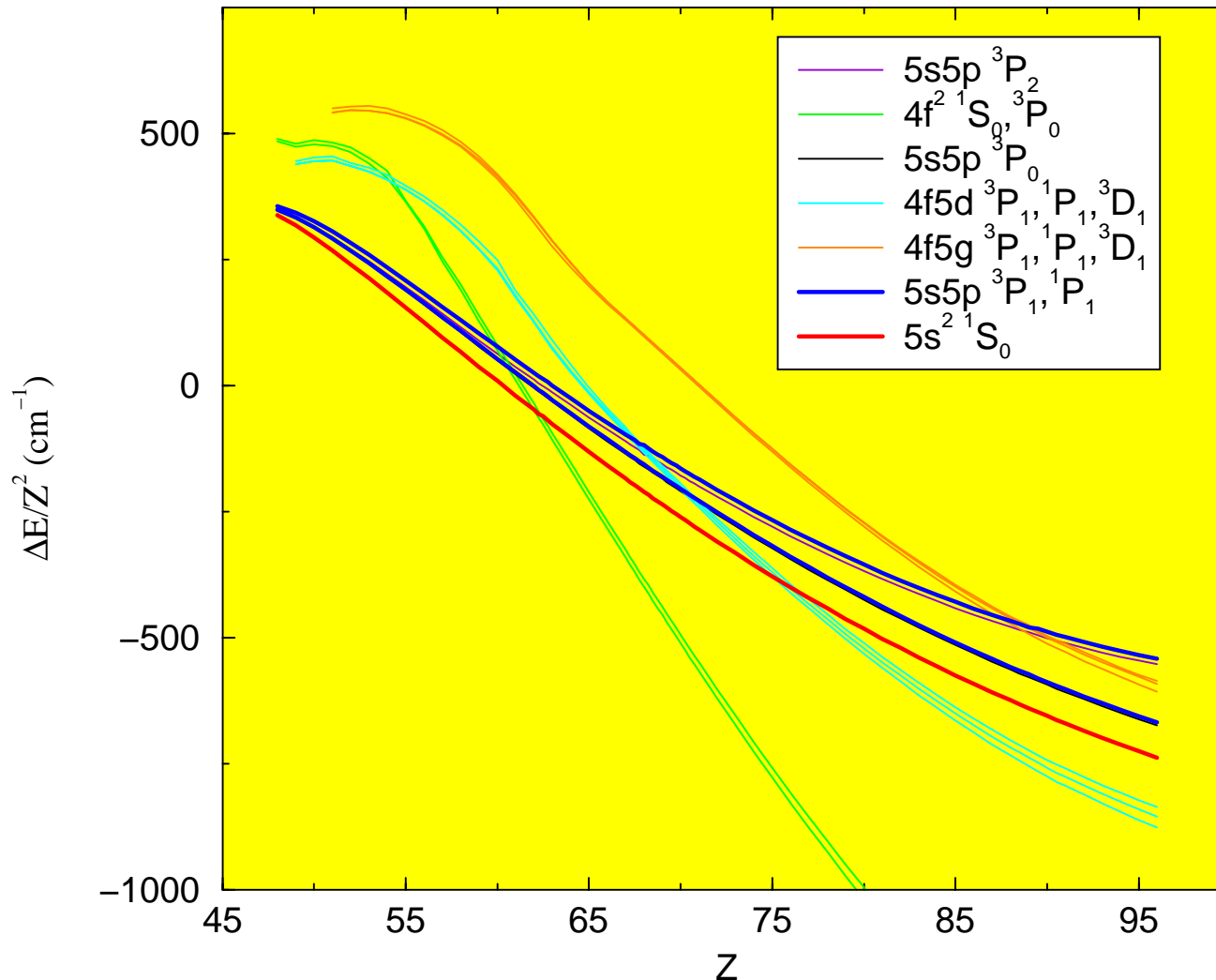


$5s^2\ ^1S_0 - 5s5p\ ^{1,3}P_1$ energy intervals



Energies relative to $4d^{10}5s^2S_{1/2}$ valence correlation only



Many more cross-ings occur in the CV+V calculation at high Z , as the f correlation orbital becomes the spectroscopic $4f$ orbital in CSF's such as

