## Helium Spectrum 2

First three levels including the effect of the mutual repulsion of electrons and not to scale!. Remember that one electron is always in the $\mathrm{n}=1$ state.

Singlet S=0
$\underset{n=3 L=0}{n=3 L=1}$
Triplet $\mathrm{S}=1$

$$
\mathrm{n}=3 \mathrm{~L}=2
$$

$$
n=3 L=1
$$

$$
n=3 L=0
$$

$$
\mathrm{n}=2 \mathrm{~L}=1
$$

$$
\mathrm{n}=2 \mathrm{~L}=0
$$

$$
\mathrm{n}=2 \mathrm{~L}=0
$$

$$
n=1 L=0
$$

