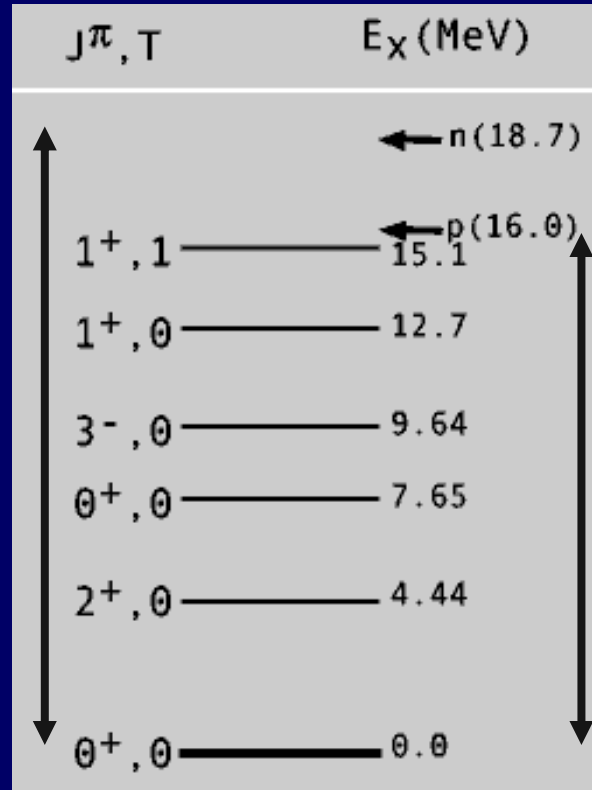


# Nuclei have energy level (just like atoms)



energy needed to remove a neutron from  $^{12}\text{C}$  is 18.7 MeV

energy needed to remove a proton from  $^{12}\text{C}$  is 16.0 MeV

$^{12}\text{C}$  energy levels

**Note the energy scale is MeV rather than eV**