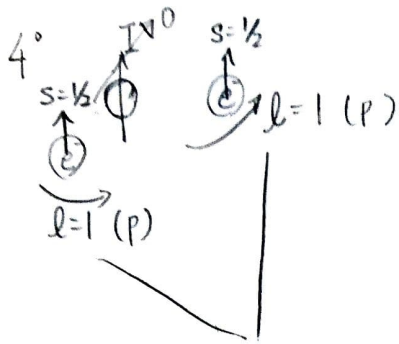


Hund's law:

1° 從低能階開始填 = 亂度最大

2° 考慮最外層能量簡併軌域

3° 以 Si 為例, 最外層 3p, 2e⁻



S: l=0
P: l=1
d: l=2

$$|l=1\rangle \otimes |l=1\rangle \rightarrow |l_{tot}=2\rangle \oplus |l_{tot}=1\rangle \oplus |l_{tot}=0\rangle$$

	↓	↓	↓
Notation	D	P	S
	Symmetric	Antisymmetric	Symmetric
electron spin	↓	↓	↓
	Antisymmetric	Symmetric	Antisymmetric
	singlet	triplet	singlet
	¹ D	<div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;"> 3 P </div>	¹ S
		↓	
		Lowest energy	