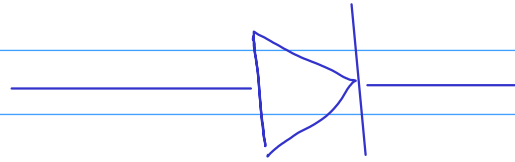
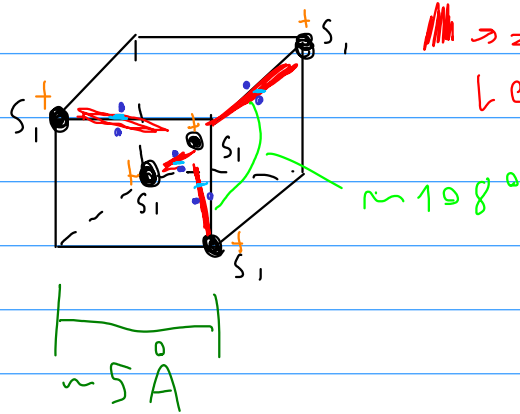


P, o d i



giunzioni PN

Si, il, io \rightarrow Tetra valente



\rightarrow zone di addensamento
legami covalenti

Tende a
raggiungere
l'elettrone
4 livelli esterni

sostituisco i si con

(Esteros o Boro)

$A_{Si} = 10^{23} \text{ at/cm}^3$

debole 10^{12} Fastoro/Boro

Fanti 10^{18} =

Penta
valente

Tetra
valente

10^{19}
piu'

10^{19}
meno

Elettroni
extra
(conduttivi)

lacune
(il contrario
di un elettrone)

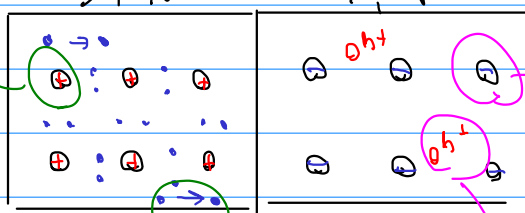
(iscione
minoritarie)

Elettroni =
Portatori maggioritari

cariche fisse

S, N

S, P



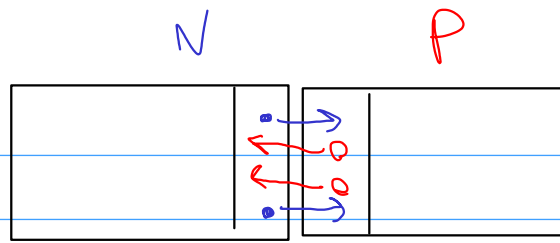
\rightarrow lacune =
portatori maggioritari

cariche
fisse

(elettroni
minoritari)

cariche mobili e^-

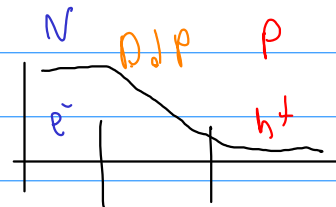
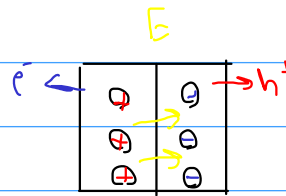
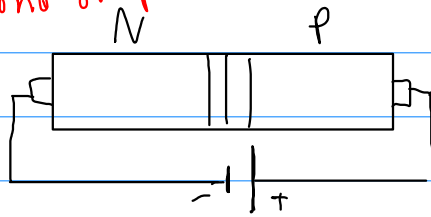
holes (h^+), lacune



lacune si spostano su N
elettroni si spostano su P

A causa
dei minori, Tosi
pressione diverse
cariche inverse
di mono impure

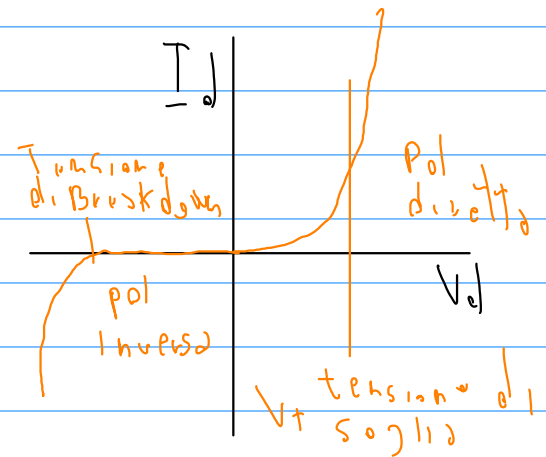
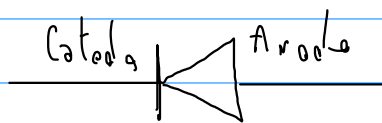
Regione di
svuotamento
Depletion
layer



Reg.
svuot.

Conduttore

Isolante



$$V_T = 0,6 \pm 0,07 \text{ V}$$

$$V_T(\text{Ge}) \approx 0,3 \text{ V}$$

Modello elettrico

