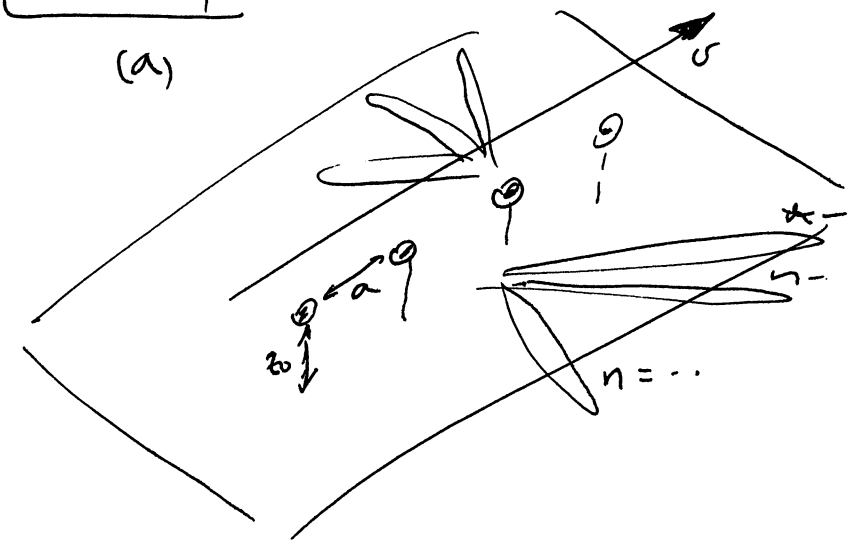
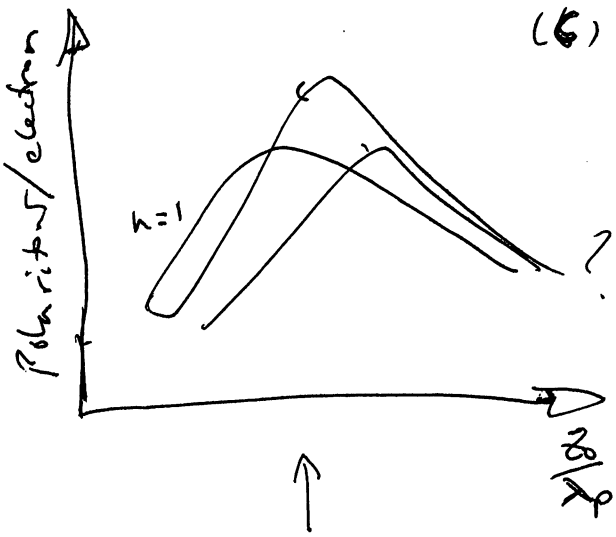
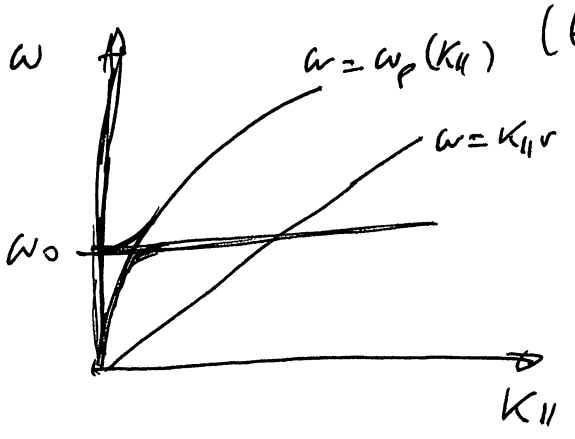
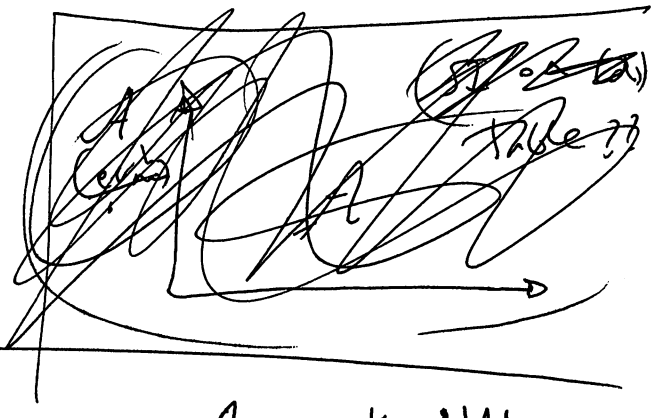
FIG. 1





fix | material
ω
a





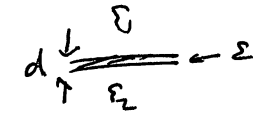
A = material {A}

[A] = E² L

$\hbar\omega = \sqrt{A K_\parallel}$

$\hbar^2\omega^2 = A K_\parallel$

→ noble metal $\varepsilon(\omega) = \varepsilon_b - \frac{\omega_{p,\mathrm{met}}^2}{\omega(\omega+i\gamma)}$



$A = \frac{d\hbar^2\omega_{b,\mathrm{met}}^2}{\varepsilon_1+\varepsilon_2}$ → Au, Ag — $\hbar\omega_{b,\mathrm{met}} \sim 9$ eV

$\varepsilon_1 = 1, \varepsilon_2 = 2$ | → $A = 39.2$ eV² nm

$d = 2$ nm

→ graphene

$A = 2e^2 E_F$ → $E_F = 0.5$ eV → $A = 1.45$ eV² nm

Table I → A

FIG. 2

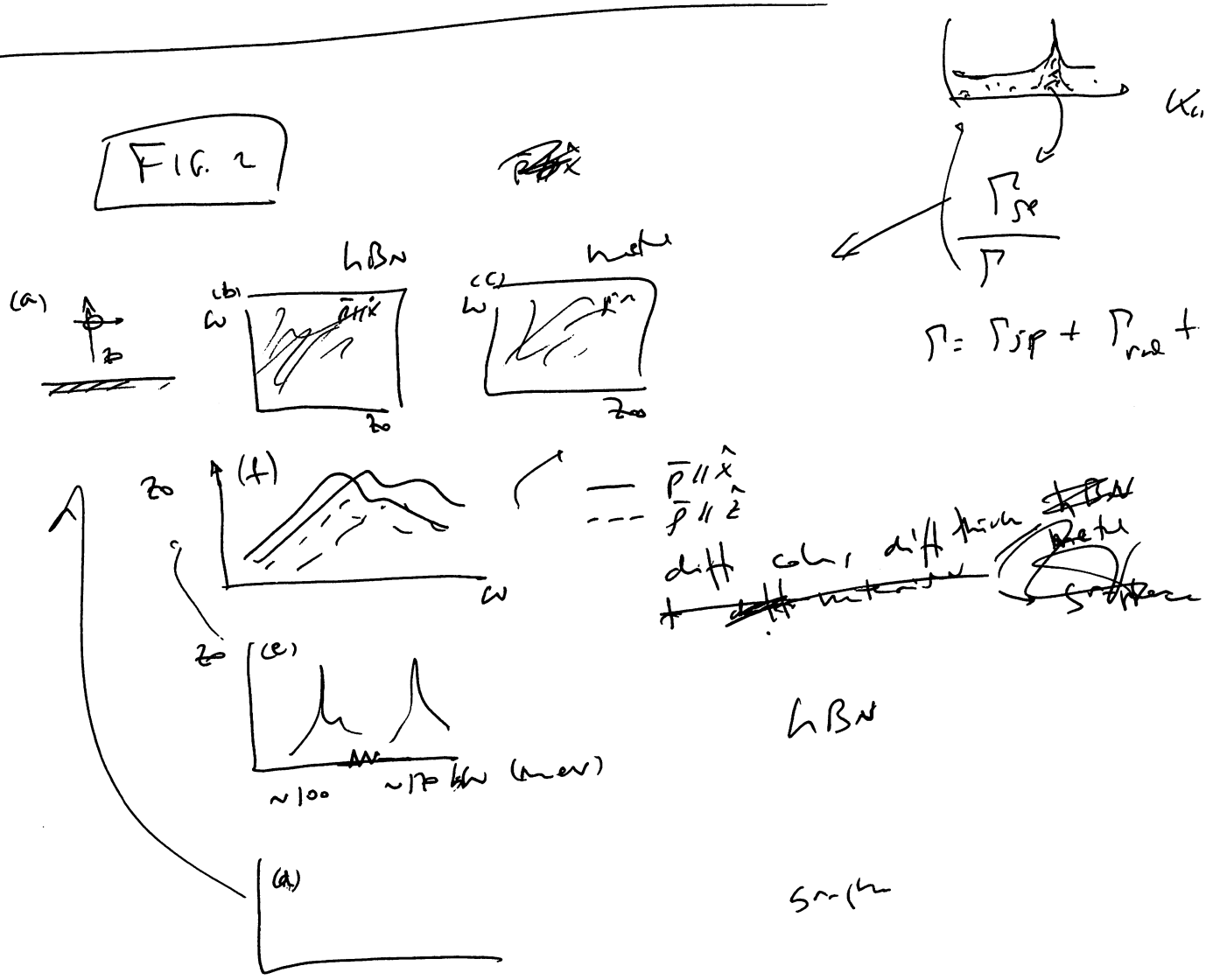
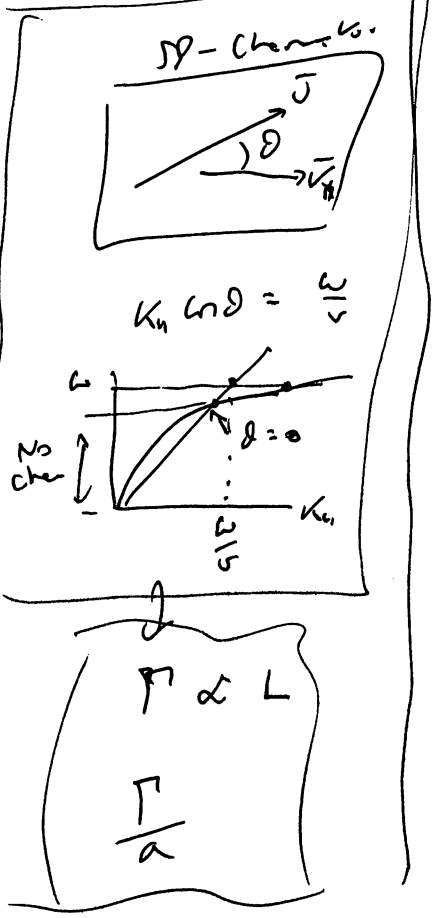


Fig. 3



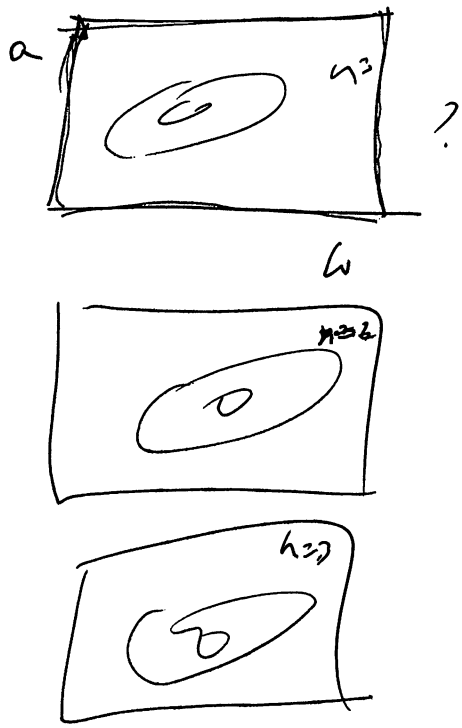
$\frac{P_n}{N} \leftarrow a, z_0, \omega, v$

take $z_0(\omega)$ from Fig. 2

$v = 0.01\,c$

$0.1\,c$

$A = \cdots$ (width)



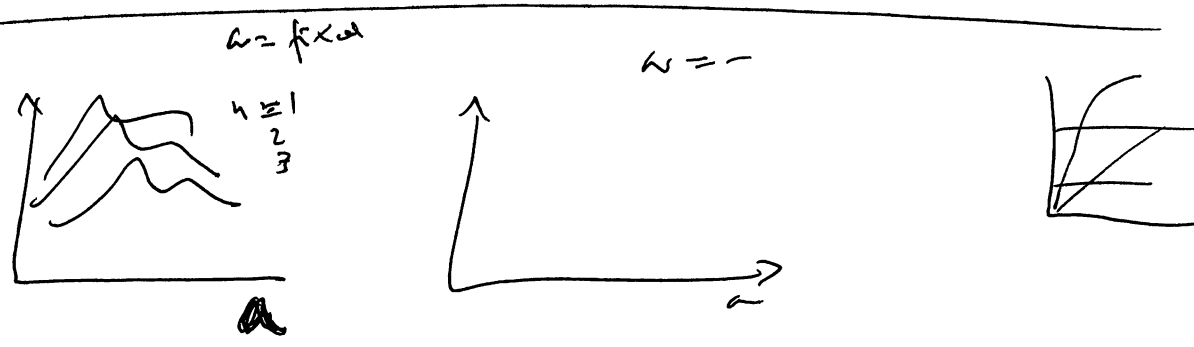
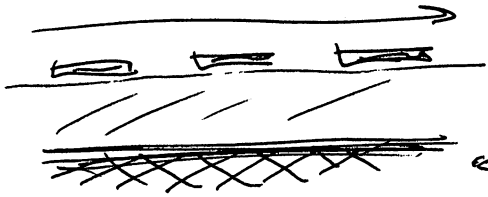
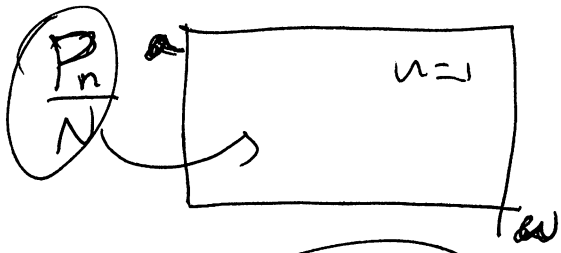


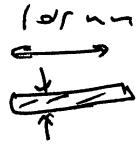
Fig 4

↑ hBN disk



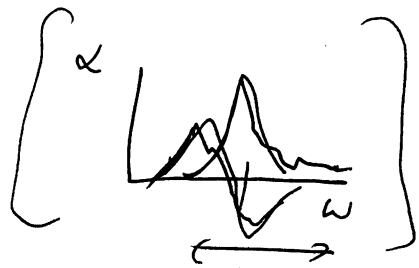
← thin metal





use #303 for α

Eq. (11)
+ Table 1



inset?

range of ω

reasonable choice of ω such that the S.P condition is satisfied at