

$$\vec{E}_I = (E_I \cos \theta_I \hat{x} - E_I \sin \theta_I \hat{z}) e^{i(\vec{k}_I \cdot \vec{r} - \omega t)}$$

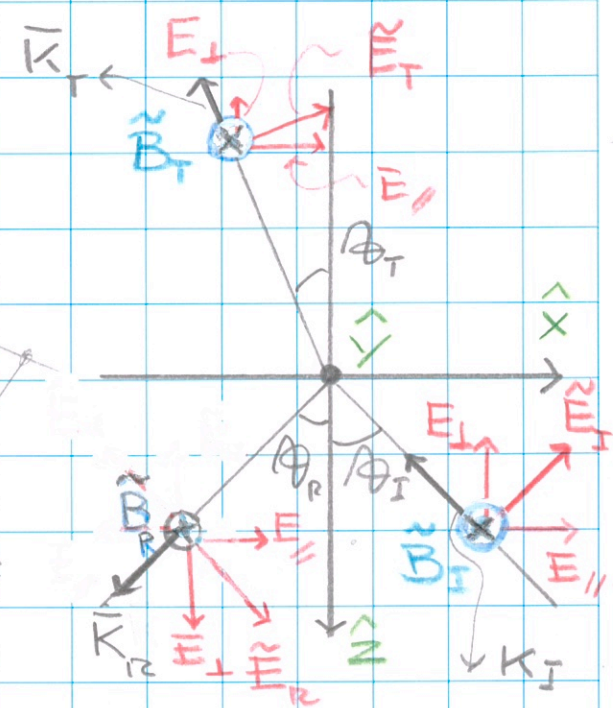
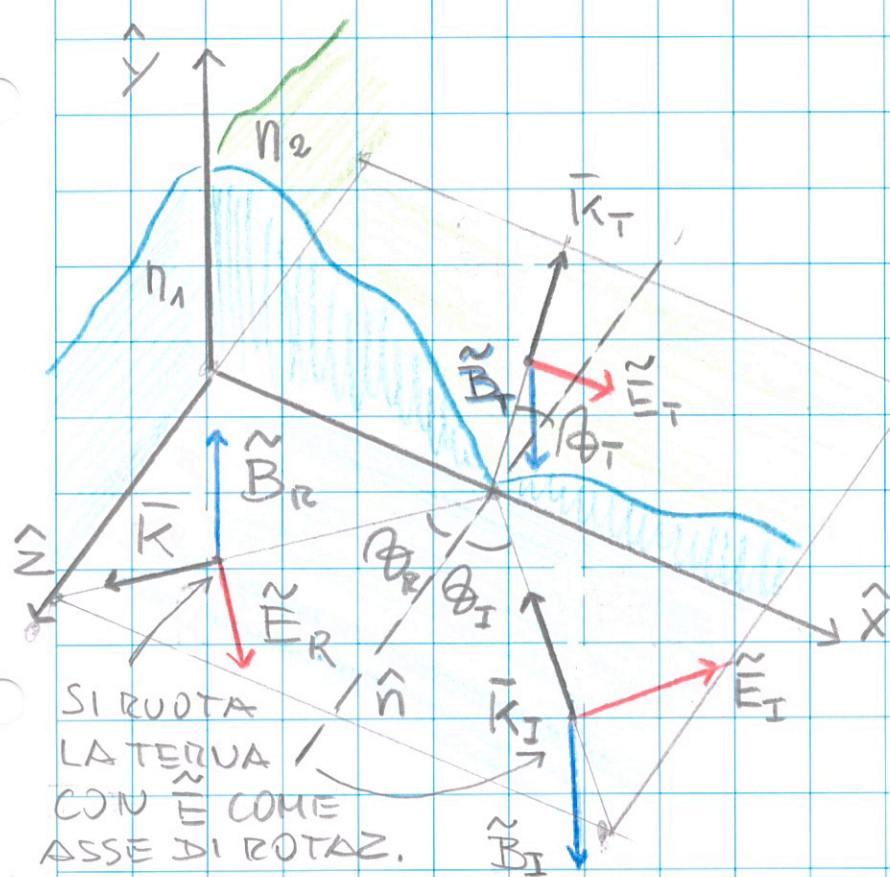
$$\vec{E}_R = (E_R \cos \theta_R \hat{x} + E_R \sin \theta_R \hat{z}) e^{i(\vec{k}_R \cdot \vec{r} - \omega t)}$$

$$\vec{E}_T = (E_T \cos \theta_T \hat{x} - E_T \sin \theta_T \hat{z}) e^{i(\vec{k}_T \cdot \vec{r} - \omega t)}$$

$$\vec{B}_I = -B_I \hat{y} e^{i(\vec{k}_I \cdot \vec{r} - \omega t)} \quad \vec{B}_R = B_R \hat{y} e^{i(\vec{k}_R \cdot \vec{r} - \omega t)}$$

$$\vec{B}_T = -B_T \hat{y} e^{i(\vec{k}_T \cdot \vec{r} - \omega t)} \quad \Rightarrow \quad -B_I + B_R = -B_T$$

$E_I \cos \theta_I + E_R \cos \theta_R = E_T \cos \theta_T$ CHE ESPRESSA
 IN TERMINI DI CAMPO \vec{E} RISULTA $\Rightarrow \quad -n_1 E_I + n_1 E_R = n_2 E_T$



SI RUOTA
 LA TERZA
 CON \vec{E} COME
 ASSE DI ROTAZ.

RIASSUMENDO LE CONDIZIONI DI CONTINUITA' DEI
 CAMPI SONO LE SEGUENTI

$$\text{TE} \begin{cases} E_I + E_R = E_T \\ n_1 E_I \cos \theta_I - n_1 E_R \cos \theta_R = n_2 E_T \cos \theta_T \end{cases}$$

$$\text{TM} \begin{cases} -n_1 E_I + n_1 E_R = -n_2 E_T \\ E_I \cos \theta_I + E_R \cos \theta_R = E_T \cos \theta_T \end{cases} \quad \text{CON } \theta_I = \theta_R$$